Mar. 5. Shows 'Comprehensive' Test Results

```
BEGIN COMMENT "SELL" COMPILER MACROCODE;                                    0000
                                                                START OF SEGMENT ********** 0002

LABEL ASSEMBLE,INTERPRET;                                                   0000
FILE IN READER(1,10);                                                       0000
FILE OUT PRINTER 1(1,15);                                                   0003
INTEGER TSIZE,I,J,K,X,Y,Z,XR,ERR,FIX,LOC,OP,N,AEQ,S,T,BREF,LEQ,             0007
B,TAG,FLAG,BUFP,BUFC,BUFB,SCANP,SCANC;                                      0007
INTEGER CLOCK;                                                              0007
INTEGER LCTR,DOTS,PREG,BUFPMAX,STAKPMIN,TMAX,SPOT,STAKP,M;                  0007
REAL ARRAY CARDS1[0:16];  INTEGER ARRAY TIN[0:63];                          0007
INTEGER ARRAY COL[1:80];                                                    0010
INTEGER ARRAY HELP,OPCODE[0:255];                                           0012
INTEGER ARRAY RTABLE,STABLE[0:299], ETABLE[0:399];                          0014
INTEGER ARRAY TIMES,SYLL[0:1022],                                           0018
U1,U3,L1,L3[0:255],                                                         0020
XREF[0:4,0:999], A[0:23];                                                   0022
INTEGER ARRAY R[0:15];                                                      0026
INTEGER SAVEP,SAVES,SAVELP,SAVELV;                                          0028
FORMAT ATEBIT(I60,7I1);                                                     0028
                                                                START OF SEGMENT ********** 0003
                                                                0003 IS 0005 LONG, NEXT SEG 0002
FORMAT FERR("     ERROR DETECTED,  TYPE ",I3,"--",I5);                      0028
                                                                START OF SEGMENT ********** 0004
                                                                0004 IS 0011 LONG, NEXT SEG 0002
FORMAT TOTALS(I20,8I10);                                                    0028
                                                                START OF SEGMENT ********** 0005
                                                                0005 IS 0005 LONG, NEXT SEG 0002
FORMAT TFORM(I5,I2,I1,I1,I3,I3,"   ",16A1,5I10,                             0028
                                                                START OF SEGMENT ********** 0006
I2,I4,I2,I4,I2,I4,I2,I4,I8);                                                0028
                                                                0006 IS 0021 LONG, NEXT SEG 0002
FORMAT RSWD(I20,"    ",80A1);                                               0028
                                                                START OF SEGMENT ********** 0007
                                                                0007 IS 0006 LONG, NEXT SEG 0002
FORMAT ASLINE(A2,I6,":",I2,I2,I2,I4,A1,"   ",80A1);                         0028
                                                                START OF SEGMENT ********** 0008
                                                                0008 IS 0013 LONG, NEXT SEG 0002
FORMAT ASLINE1(25X1,80A1);                                                  0028
                                                                START OF SEGMENT ********** 0009
                                                                0009 IS 0005 LONG, NEXT SEG 0002
FORMAT FCONS("       COMPILE CONSTANT IN LOCATION 1.",I3,"     ",16I3);      0028
```

```
FORMAT FFIX("       FIXUP LOCATION ",I3,".",I1);

FORMAT FCMP("        COMPILE ",I3,".",I1,":   ",A5,I5,"   ",A6);

FORMAT FDISP(" IDENTIFIER TABLE ENTRY FOR ",A6," SET TO TYPE ",
I1, ", SIZE ",I3,", LOCATION ",I3,".");
FORMAT FDOTS(".....");

FORMAT SIXALF(I10,"  ",6A1);

FORMAT FCARD("*************** ",80A1,"*****",I15);

FORMAT XREFS(I20,15I5);


INTEGER ARRAY TRANS[0:255];
STREAM PROCEDURE UNPAK(PACKED,UNPACKED);
BEGIN SI←PACKED;DI←UNPACKED;
40(DI←DI+7;DS←CHR);
40(DI←DI+7;DS←CHR)  END;
PROCEDURE MYREAD;
COMMENT READS A CARD INTO COL[1] THRU COL[80] IN Q PRINT CODE;
BEGIN INTEGER I;

READ(READER,10,CARDS1[*]);
FOR I←1 STEP 1 UNTIL 80 DO COL[I]←0;
UNPAK(CARDS1,COL);
FOR I    ←1 STEP 1 UNTIL 80 DO COL[I]←TIN[COL[I]] END;

FILL TIN[*] WITH
128,129,130,131,132,133,134,135,
```

```
START OF SEGMENT ********** 0010
0010 IS 0013 LONG, NEXT SEG 0002
                        0028
START OF SEGMENT ********** 0011
0011 IS 0010 LONG, NEXT SEG 0002
                        0028
START OF SEGMENT ********** 0012
0012 IS 0014 LONG, NEXT SEG 0002
                        0028
START OF SEGMENT ********** 0013
                        0028
0013 IS 0020 LONG, NEXT SEG 0002
                        0028
START OF SEGMENT ********** 0014
0014 IS 0004 LONG, NEXT SEG 0002
                        0028
START OF SEGMENT ********** 0015
0015 IS 0006 LONG, NEXT SEG 0002
                        0028
START OF SEGMENT ********** 0016
0016 IS 0009 LONG, NEXT SEG 0002
                        0028
START OF SEGMENT ********** 0017
0017 IS 0005 LONG, NEXT SEG 0002
                        0028
                        0029
                        0029
                        0031
                        0032
                        0033
                        0033
                        0033
START OF SEGMENT ********** 0018
                        0000
                        0003
                        0009
                        0010
0018 IS 0019 LONG, NEXT SEG 0002
                        0033
                        0034
START OF SEGMENT ********** 0019
```

```
136,137,141,140,152,158,176,159,
155,177,178,179,180,181,182,183,
184,185,149,174,172,174,152,147,
168,186,187,188,189,190,191,160,
161,162,138,173,151,142,150,143,
64,144,163,164,165,166,167,168,
169,170,148,171,141,147,142,154;

COMMENT > IS LOZENGE, < IS QUESTION MARK, % IS CENTS SIGN,
       ≤ IS CR;
FILL TRANS[*] WITH
48,12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,

12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,
12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,
12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,
48,12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,
12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,
12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,
12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,
0,1,2,3,4,5,6,7,8,9,"$","%","@","#",")","≤",
"/",48,63,"=",",",",",".",";","-",12,48,"*","+",48,48,":",15,
"P","Q","R","S","T","U","V","W","X","Y","Z","%","&","*","("," ",
14,17,18,19,20,21,22,23,24,25,33,34,35,36,37,38,
12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,
12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,
12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,
12,12,12,12,12,12,12,12,12,12,12,12,12,12,12,12;

FILL OPCODE[*] WITH
"STOP ","SKL  ","SKT  ","SKY  ","ALARM","EXL  ","EXT  ","EXY  ",

"SKA  ","--09 ","SKK  ","SKX  ","EXA  ","--0D ","EXK  ","EXX  ",
"ADIR0","DIR0 ","LIR0 ","IIR0 ","ADIR1","DIR1 ","LIR1 ","IIR1 ",
"ADIR2","DIR2 ","LIR2 ","IIR2 ","ADIR3","DIR3 ","LIR3 ","IIR3 ",
"BRU00","BRU01","BRU02","MOD0 ","BRU10","BRU11","BRU12","MOD1 ",
"BRU20","BRU21","BRU22","MOD2 ","BRU30","BRU31","BRU32","MOD3 ",
"LODX ","LODY ","LODK ","LODA ","CHGX ","CHGY ","CHGK ","CHGA ",
"SETX ","SETY ","SETK ","SETA ","RSTX ","RSTY ","RSTK ","RSTA ",
"RETPT","--41 ","LKBR0","LKBR1","LIB  ","SIB  ","PROT0","PROT1",
"RETRN","--49 ","PAL0 ","PAL1 ","LDES0","LDES1","CLRN ","--4F ",
```

```
0035
0035
0035
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0035
0035
0019 IS 0064 LONG, NEXT SEG 0002
0035
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0035
0036
START OF SEGMENT ********** 0020
0037
0037
0037
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0037
0037
0037
0037
0037
0037
0037
0037
0020 IS 0256 LONG, NEXT SEG 0002
0037
0038
START OF SEGMENT ********** 0021
0039
0039
0039
0039
0039
0039
0039
0039
0039
0039
```

```
"LUR0 ","LUR1 ","LBR0 ","LBR1 ","--54 ","--55 ","--56 ","--57 ",                0039
"--58 ","--59 ","--5A ","--5B ","--5C ","--5D ","--5E ","--5F ",                0039
"--60 ","--61 ","--62 ","--63 ","--64 ","--65 ","--66 ","--67 ",                0039
"--68 ","--69 ","--6A ","--6B ","--6C ","--6D ","--6E ","--6F ",                0039
"--70 ","--71 ","--72 ","--73 ","--74 ","--75 ","--76 ","--77 ",                0039
"--78 ","--79 ","--7A ","--7B ","--7C ","--7D ","--7E ","--7F ",                0039
"SRJ00","SRJ01","SRJ02","SLR0 ","SRJ10","SRJ11","SRJ12","SLR0S",               0039
"SRJ20","SRJ21","SRJ22","SRR  ","SRJ30","SRJ31","SRJ32","--8F ",               0039
"NK   ","NE   ","NKR  ","NER  ","NKCM ","NECM ","NKRCM","NERCM",               0039
"TKM  ","TK   ","TSK  ","TKMS ","TPKM ","TPK  ","TPKMS","TPKS ",               0039
"SPEC1","SPEC2","LTKM0","LTKM1","LSR  ","INK  ","--A6 ","TAIR ",               0039
"PA0  ","PA1  ","PAS0 ","PAS1 ","PPA0 ","PPA1 ","PPAS0","PPAS1",               0039
"TIRA ","XIRA ","--B2 ","--B3 ","POA0 ","POA1 ","PON  ","POC  ",               0039
"PC   ","PC-P ","PC+P ","PCP  ","PPC  ","PPC-P","PPC+P","PPCP ",               0039
"LPNR0","LPNR1","LPNR2","PKA  ","LPKR0","LPKR1","LPKR2","PKB  ",               0039
"PN   ","PNS  ","PNS- ","PNS+ ","PPN  ","PPNS ","PPNS-","PPNS+",               0039
"ADK  ","CLA  ","SUK  ","NOP  ","CLM0 ","CLM1 ","READ ","PUN  ",               0039
"TRM0 ","TRM1 ","TRM2 ","TRM3 ","TRA0 ","TRA1 ","TRA2 ","TRA3 ",               0039
"ADA0 ","ADA1 ","SUA0 ","SUA1 ","MUL0 ","MUL1 ","MULR0","MULR1",               0039
"ADM0 ","ADM1 ","SUM0 ","SUM1 ","DIV0 ","DIV1 ","--EE ","--EF ",               0039
"--F0 ","ALT0 ","ART0 ","ALRT0","--F4 ","AL   ","AR   ","ALR  ",               0039
"LLCR ","OC   ","LRCR ","LP0SR","LLLR ","CC   ","LRLR ","STOP ";               0039
                                                                  0021 IS 0256 LONG, NEXT SEG 0002
FOR I←0 STEP 1 UNTIL 255 DO HELP[I]←0;                                          0039
ASSEMBLE:                                                                       0043
BEGIN COMMENT THIS IS AN ASSEMBLER FOR MACROCODE LANGUAGE;                      0044
COMMENT CARD FORMAT IS: COLS 1-6 LOC,                                           0044
                        COLS 8-12 OP,                                           0044
                        COL 15  N,                                              0044
                        COLS 17-22  SYMBOLIC ADDRESS                            0044
                        COLS 24-33  NUMERIC ADDRESS (IF COL 17 BLANK),          0044
                          FOLLOWED BY REMARKS;                                  0044
INTEGER PROCEDURE SEARCH(C); VALUE C; INTEGER C;                                0044
                                                                  START OF SEGMENT ********** 0022
BEGIN COMMENT FIND SYMBOL THAT STARTS IN COL[C] IN ASSEMBLER                    0000
    SYMBOL TABLE;                                                               0000
INTEGER I,X; LABEL L;                                                           0000
                                                                  START OF SEGMENT ********** 0023
I←C-1;X←0;                                                                      0000
FOR I←I+1 WHILE COL[I]≥128 DO X←64×X+COL[I]-128;                                0002
FOR I←0 STEP 1 UNTIL TSIZE DO IF STABLE[I]=X THEN GO TO L;                      0009
```

```
I←TSIZE←TSIZE+1;                                                    0014
STABLE[I]←X;                                                        0016
ETABLE[I]←-1023;                                                    0017
RTABLE[I]←0;                                                        0019
L:SEARCH ← I;                                                       0020
XR←XR+1;                                                            0021
XREF[XR DIV 1000, XR MOD 1000] ← 10000×LCTR+RTABLE[I];              0023
RTABLE[I]←XR  END SEARCH;                                           0027
                                        0023 IS 0032 LONG, NEXT SEG 0022
LABEL NEWCARD,PROCESSLOC,PROCESSOP,PROCESSN,PROCESSA,PROCESSC,ASSEM,  0000
PLINE,DONE;                                                         0000
TSIZE←0; STABLE[0]←((16×64+53)×64+33)×64+37; COMMENT"/EQU";          0000
ETABLE[0]←-1;                                                       0005
RTABLE[0]←0;                                                        0006
FOR I←0 STEP 1 UNTIL 1022 DO SYLL[I]←0;                             0007
LCTR←0;  XR←-1;                                                     0012
NEWCARD:MYREAD; ERR←0; FIX←0;                                       0014
BREF←0;                                                             0017
PROCESSLOC: IF COL[1]=64 THEN BEGIN LOC←-1;GO TO PROCESSOP END;     0017
IF COL[1]=149 THEN BEGIN LOC← IF COL[3]≠64 THEN                     0021
(COL[2]-128)×10 + COL[3]-128 + 300 ELSE COL[2]-128+300;             0025
GO TO PROCESSOP END;                                                0032
LOC←SEARCH(1);                                                      0033
FOR I←300 STEP 1 UNTIL 399 DO ETABLE[I]←-1023;                      0034
PROCESSOP: IF COL[8]=64 THEN                                        0039
BEGIN WRITE(PRINTER,ASLINE1,FOR I←1 STEP 1 UNTIL 80 DO TRANS[COL[I]]);  0041
GO TO NEWCARD  END;                                                 0054
IF COL[8]<138 THEN GO TO DONE;                                      0054
COL[7]←144; OP←ETABLE[SEARCH(7)]; COL[7]←64;                        0056
IF OP=-1023 THEN BEGIN ERR←1;OP←0 END;                              0061
PROCESSN: N←IF COL[15]=64 THEN 0 ELSE COL[15]-128;                  0064
PROCESSA: IF COL[17]=64 THEN GO TO PROCESSC;                        0069
AEQ←IF COL[17]≠149 THEN SEARCH(17 ) ELSE IF COL[19]=64 THEN         0072
(COL[18]-128)+300 ELSE(COL[18]-128)×10 + COL[19]-128 + 300;         0076
IF(T←ETABLE[AEQ])<0 THEN                                            0084
BEGIN ETABLE[AEQ]← IF LCTR=0 THEN -1024 ELSE -LCTR;                 0086
AEQ← (-T)MOD 1024; IF OP MOD 4 ≠ 0 THEN ERR←1;                      0090
FIX←1 END ELSE AEQ←T;                                               0094
GO TO ASSEM;                                                        0097
PROCESSC:IF COL[24]=64 THEN BEGIN AEQ←0; GO TO ASSEM END;           0098
IF COL[24]=178 THEN                                                 0102
```

```
BEGIN I←24; B←2 END ELSE BEGIN I←23; B←10 END;                          0103
AEQ←0; FOR I←I+1 WHILE COL[I]≥128 DO AEQ←AEQ×B+COL[I]-128;              0107
ASSEM:IF OP=-1 THEN S←LEQ←AEQ ELSE BEGIN                                0116
S←SYLL[LCTR]←(4×N+OP)×256+AEQ; LEQ←LCTR END;                            0120
IF LOC≥0 THEN BEGIN                                                     0124
IF ETABLE[LOC]>0 THEN ERR←1 ELSE IF ETABLE[LOC]≠-1023 THEN              0126
BEGIN BREF←J←-ETABLE[LOC];                                              0130
FOR I←J WHILE I≠1023 DO                                                 0132
BEGIN J←SYLL[I]MOD 1024; SYLL[I]←SYLL[I]-J+LEQ END;                     0135
END;                                                                    0141
ETABLE[LOC]←LEQ;                                                        0141
END;                                                                    0142
PLINE: WRITE(PRINTER,ASLINE, IF ERR=0 THEN "  " ELSE "**",              0142
LCTR, S DIV 8192, S DIV 1024 MOD 8, S DIV 256 MOD 4, S MOD 256,         0153
IF FIX=0 THEN " " ELSE "/",                                             0167
FOR I←1 STEP 1 UNTIL 80 DO TRANS[COL[I]]);                              0171
IF OP≥0 THEN LCTR←LCTR+1; GO TO NEWCARD;                                0180
DONE:WRITE(PRINTER[PAGE]);                                              0183
FOR I←0 STEP 1 UNTIL TSIZE DO BEGIN                                     0186
X←STABLE[I];J←-1;                                                       0188
FOR J←J+1 WHILE X> 0 DO                                                 0190
BEGIN A[J]←X MOD 64; X←X DIV 64 END;                                    0193
WRITE(PRINTER,SIXALF,ETABLE[I],                                         0197
FOR J←J-1 STEP -1 UNTIL 0 DO TRANS[A[J]+128]);                          0202
J←RTABLE[I];                                                            0212
WRITE(PRINTER,XREFS,XREF[J DIV 1000,J MOD 1000]DIV 10000,               0213
FOR J←XREF[J DIV 1000, J MOD 1000] MOD 10000 WHILE J≠0                  0223
  DO XREF[J DIV 1000,J MOD 1000]DIV 10000)                              0227
END END ASSEMBLE;                                                       0231
                                                0022 IS 0240 LONG, NEXT SEG 0002
INTERPRET:                                                              0045
BEGIN COMMENT THIS PROCEDURE CORRESPONDS TO MICRO-INSTRUCTIONS          0045
FOR PERFORMING THE COMPILING ACTIONS SPECIFIED IN MICROCODE.            0045
IT ALSO HAS ADDITIONAL TRACING AND PRINTOUT FACILITIES TO               0045
AID IN DEBUGGING AND IMPROVING THE COMPILER.                            0045
THE LAST CARD IN ASSEMBLY LANGUAGE SHOULD HAVE A DIGIT  N  PUNCHED      0045
IN COLUMN 8.  THIS MEANS ASSEMBLY ENDS, THE CARDS DEFINING THE          0045
COMPILERS RESERVED WORDS FOLLOW, AND THEN INTERPRETATION                0045
BEGINS WITH EACH INSTRUCTION TRACED  N  TIMES;                          0045
COMMENT THE NEXT CARDS DEFINE CERTAIN LOCATIONS WHICH ARE USED          0045
BY BOTH THE MICRO-CODE AND THE MACRO-CODE;                              0045
```

```
DEFINE PARITY = L1[100]#, LOCP=L1[110]#, TYP=L1[120]#,                    0045
                                                START OF SEGMENT ********** 0024
LOCV=L1[130]#, SIZ=L1[140]#, MODE=L1[150]#, CHAR=L1[160]#;                0000
DEFINE TSIZ=L1[170]#, TLOC=L1[180]#, NMASKS=L1[190]#;                     0000
LABEL HLT,LOD,ADD,SUB,TEN,ORR,SLC,PCH,XEC,ERR,TST,SET,MASK,GET,XOR,       0000
TGET,INC,ST,INX,CMP,XT,XF,SEE,GE,EQ,CALL,JMP,PUSH,POP,NEWREAD,           0000
EXIT,BRANCH,FETCH;                                                        0000
LABEL OVRFLO,XCH,SRC;                                                     0000
LABEL SCMP,CMP1,SYNTAX,POP1,SKIP,MASK1,MASK2;                             0000
SWITCH S2←HLT,LOD,ADD,SUB,TEN,ORR,SLC,PCH,                                0000
XEC,XEC,XEC,XEC,TST,TGET,SET,MASK,SCMP,                                   0002
XOR,SRC;                                                                  0002
SWITCH S3←GET,ST,INC,XCH;                                                 0012
SWITCH S4←INX,CMP,XT,XF;                                                  0018
SWITCH S1←S2[4×N+B+1],SEE,GE,EQ,CALL,JMP,S3[B+1],S4[B+1];                 0024
INTEGER PROCEDURE SYMBOL(I); VALUE I; INTEGER I;                          0054
BEGIN INTEGER J,Y,Z;                                                      0054
                                                START OF SEGMENT ********** 0025
COMMENT THIS PROCEDURE IS USED ONLY TO MAKE PRINTOUTS WHICH               0000
    FACILITATE DEBUGGING;                                                 0000
IF I=0 THEN SYMBOL←"      " ELSE                                          0000
BEGIN Y←U3[I]MOD 2*29 + 160×2*24;                                         0002
Z←L3[I]DIV 2*16;                                                          0012
J←0;                                                                      0016
FOR I←1 STEP 1 UNTIL 4 DO                                                 0016
BEGIN J←64×J+TRANS[Y DIV 2*24];  Y←256×Y MOD 2*32 END;                    0018
SYMBOL←(J×64+TRANS[Z DIV 256])×64 + TRANS[Z MOD 256] END END SYMBOL;       0029
                                                0025 IS 0037 LONG, NEXT SEG 0024
PROCEDURE STDISP(I); VALUE I; INTEGER I;                                  0054
BEGIN INTEGER J;                                                          0054
                                                START OF SEGMENT ********** 0026
WRITE(PRINTER,FDISP,SYMBOL(I), U3[I]DIV 2*29,                             0000
L3[I]MOD 2*16 DIV 256,  J← L3[I] MOD 256);                                0012
HELP[J]←I END;                                                            0023
                                                0026 IS 0026 LONG, NEXT SEG 0024
INTEGER PROCEDURE LOOKUP;                                                 0054
BEGIN COMMENT THIS PROCEDURE  SEARCHES THE COMPILER SYMBOL                0054
TABLE FOR THE IDENTIFIER STORED IN A[0] THRU A[5];                        0054
INTEGER J,K,Y,Z,I;                                                        0054
                                                START OF SEGMENT ********** 0027
LABEL LOOP,DONE,ADV,INSERT;                                               0000
```

```
J←REAL(NOT(BOOLEAN(A[0])EQV  BOOLEAN(A[1]) EQV BOOLEAN(A[2])                0000
EQV BOOLEAN(A[3]) EQV BOOLEAN(A[4]) EQV BOOLEAN(A[5])));                    0001
Y←((A[0]×256+A[1])×256+A[2])×256+A[3];                                      0005
Z←A[4]×256+A[5];                                                            0009
K←0;                                                                        0012
LOOP:I←128 + (J+K)MOD 128;                                                  0012
IF U3[I] DIV 2*16 = 0 THEN GO TO INSERT;                                    0015
IF U3[I] MOD 2*29 ≠ Y THEN GO TO ADV;                                       0019
IF  L3[I] DIV 2*16 ≠ Z THEN GO TO ADV;                                      0024
GO TO DONE;                                                                 0028
ADV:                                                                        0029
K←(3×K+1)MOD 256;  GO TO LOOP;                                              0030
INSERT:U3[I]←TYP  ×2*29 + Y;                                                0032
L3[I]←(Z×256+SIZ)×256+LOCV;                                                 0039
LOCV←LOCV-1;                                                                0042
IF LOCV<0 THEN BEGIN M←50; GO TO ERR END;                                   0044
STDISP(I);                                                                  0049
DONE:LOOKUP←I END LOOKUP;                                                   0050
                                                    0027 IS 0055 LONG, NEXT SEG 0024
PROCEDURE READRES;                                                          0054
BEGIN COMMENT THIS PROCEDURE READS THE TABLE OF RESERVED WORD               0054
CODES. THE CARDS HAVE RESERVED WORDS IN COLS 1-6 AND THEIR INTERNAL         0054
CODES IN DECIMAL IN COLS 10-12.  A  BLANK CARD ENDS THIS                    0054
DECK, WHICH IS TO BE FOLLOWED BY A SAMPLE SOURCE PROGRAM;                   0054
INTEGER I,J;                                                                0054
                                                    START OF SEGMENT ********** 0028
LABEL  LOOP;                                                                0000
LOOP: MYREAD; IF COL[1] ≠ 64 THEN BEGIN                                     0000
FOR I←1 STEP 1 UNTIL 6 DO A[I-1]←IF COL[I]=64 THEN 0 ELSE COL[I];           0002
A[0]←A[0]-160;                                                              0011
TYP←0; LOCV←128;                                                            0013
SIZ←((COL[10]-128)×10+(COL[11]-128))×10+COL[12]-128;                        0016
I←LOOKUP;                                                                   0023
GO TO LOOP END END READRES;                                                 0024
                                                    0028 IS 0027 LONG, NEXT SEG 0024
PROCEDURE TRACE;                                                            0054
BEGIN   COMMENT PRINT CURRENT STATE OF COMPILER;                            0054
INTEGER J;                                                                  0054
                                                    START OF SEGMENT ********** 0029
PROCEDURE UNCH(X,J); VALUE X,J; INTEGER X,J;                                0000
BEGIN INTEGER I;                                                            0000
```

```
                                                                                START OF SEGMENT ********** 0030
FOR I←0 STEP 1 UNTIL 3 DO BEGIN                                                                          0000
A[I+J]← X MOD 256;       X ← X DIV 256  END;                                                             0001
END UNCH;                                                                                                0006
                                                                                0030 IS 0008 LONG, NEXT SEG 0029
UNCH(L3[SCANP-2],0);                                                                                     0000
UNCH(U3[SCANP-2],4);                                                                                     0001
UNCH(L3[SCANP-1],8);                                                                                     0003
UNCH(U3[SCANP-1],12);                                                                                    0005
UNCH(L3[SCANP  ],16);                                                                                    0007
UNCH(U3[SCANP  ],20);                                                                                    0008
DOTS←0;                                                                                                  0009
WRITE(PRINTER,TFORM,PREG,T,N,B,M,TIMES[PREG],                                                            0010
FOR J←0 STEP 1 UNTIL 15 DO TRANS[A[J+SCANC DIV 2]],                                                      0022
FOR J←0 STEP 1 UNTIL 4 DO L3[STAKP+J],                                                                   0028
FOR J←1,2,5,6,9,10,13,14 DO L1[J],                                                                       0033
CLOCK);                                                                                                  0051
END TRACE;                                                                                               0056
                                                                                0029 IS 0059 LONG, NEXT SEG 0024
PROCEDURE PUNCH(X); VALUE X; INTEGER X;                                                                  0054
BEGIN COMMENT ADD 8 BITS TO OUTPUT BUFFER;                                                               0054
INTEGER Y;                                                                                               0054
                                                                                START OF SEGMENT ********** 0031
IF BUFC<8 THEN  L3[BUFP]←L3[BUFP]+2*(4×BUFC)×X                                                           0000
ELSE U3[BUFP]←U3[BUFP] + 2*(4×BUFC-32)×X;                                                                0005
PARITY←REAL(BOOLEAN(PARITY) EQV BOOLEAN(Y←X DIV 16)                                                      0012
EQV BOOLEAN( Y← X MOD 16 ));                                                                             0013
WRITE(PRINTER,ATEBIT,                                                                                    0016
FOR I←1 STEP 1 UNTIL 8 DO X DIV 128 + (X←(X+X)MOD 256)×0);                                               0019
BUFC←BUFC+2;   IF BUFC=16 THEN                                                                           0032
BEGIN BUFP←BUFP+1;   IF BUFP>BUFPMAX THEN BUFPMAX←BUFP;                                                  0034
IF BUFP > STAKP THEN GO TO OVRFLO;  U3[BUFP]←L3[BUFP]←0; BUFC←0                                          0038
END;                                                                                                     0043
END PUNCH;                                                                                               0044
                                                                                0031 IS 0046 LONG, NEXT SEG 0024
PROCEDURE COMPILE(X); VALUE X; INTEGER X;                                                                0054
BEGIN COMMENT OUTPUTS ONE SYLLABLE TO OBJECT PROGRAM;                                                    0054
IF FLAG=1 THEN BEGIN PUNCH(PARITY+14×16); PARITY←0 END                                                   0054
ELSE BEGIN PARITY←6; PUNCH(6×16+ LOOP DIV 256 + 2);                                                      0059
COMMENT ASSUMES LOADER CODES ARE 6 FOR BEGIN SYLLABLE, 14 FOR END                                        0064
SYLLABLE, 5 FOR END MESSAGE;                                                                             0064
```

```
PUNCH(LOCP MOD 256) END;                                                    0064
PUNCH(X MOD 256); PUNCH(X DIV 256);                                         0065
FLAG←1; COMMENT THIS MEANS AN END-SYLLABLE OR END-MESSAGE MUST              0068
FOLLOW;                                                                     0069
WRITE(PRINTER,FCMP,LOCP MOD 256, LOCP DIV 1024,                             0069
OPCODE[X DIV 256], X MOD 256, SYMBOL(HELP[X MOD 256]));                     0079
LOCP←LOCP+1024;                                                             0089
IF LOCP ≥ 4096 THEN BEGIN LOCP←LOCP-4095;                                   0091
     IF LOCP≥256 THEN BEGIN M←60; GO TO ERR END END;                        0094
END COMPILE;                                                                0099
DEFINE BUFB=16#;                                                            0103
COMMENT THE INTERPRETER PROGRAM STARTS HERE;                                0103
COMMENT   **********************************;                             0103
FOR I←128 STEP 1 UNTIL 255 DO L3[I]←U3[I]←0;                                0103
BUFPMAX←0; STAKPMIN←128;                                                    0108
CLOCK←0;                                                                    0110
FOR I←0 STEP 1 UNTIL 1022 DO TIMES[I]←0;                                    0110
TMAX ← COL[8]-128;                                                          0115
WRITE(PRINTER[PAGE]);                                                       0117
READRES;   WRITE(PRINTER[PAGE]);                                            0120
NMASKS←BUFC←0;                                                              0123
PREG←0;                                                                     0125
BUFP←BUFB;                                                                  0126
MODE←0; LOCV←254; LOCP←1024; NMASKS←0;                                      0126
STAKP←127; TAG←1;  X←0;  L3[STAKP]←5;                                       0131
SCANP←BUFB;                                                                 0135
L3[SCANP]←200; U3[SCANP]←0;                                                 0136
PARITY←0;                                                                   0138
SCANC←0;                                                                    0139
FETCH: S←SYLL[PREG];                                                        0140
CLOCK←CLOCK+1;                                                              0142
M←(S+X)MOD 256;    X←0;                                                     0143
B←S DIV 256 MOD 4;                                                          0145
N← S DIV 1024 MOD 8;                                                        0147
T ← S DIV 8192;                                                             0149
TIMES[PREG]←I←TIMES[PREG]+1; IF I≤TMAX THEN TRACE                           0150
ELSE IF DOTS=0 THEN                                                         0154
      BEGIN WRITE(PRINTER,FDOTS); DOTS←1 END;                               0158
PREG←PREG+1;                                                                0163
GO TO S1[T+1];                                                              0164
LOD:U3[STAKP-1]←0;L3[STAKP-1]←M; GO TO PUSH;                                0166
```

```
ADD:L3[STAKP]←L3[STAKP]DIV 256 × 256+(L3[STAKP]+M)MOD 256;GO TO FETCH;                0171
SUB:L3[STAKP]←L3[STAKP]DIV 256×256+(L3[STAKP]+256-M)MOD 256;GO TO FETCH;             0175
TEN:L3[STAKP]←(L3[STAKP]×10)MOD 256; GO TO FETCH;                                    0181
XOR:PARITY←REAL(NOT(BOOLEAN(PARITY)EQV BOOLEAN(M)));                                 0185
IF M=10 THEN      BEGIN COMMENT FOR DEBUGGING PURPOSES ONLY;                         0187
Y←U3[STAKP+2];  Z←L3[STAKP+2];                                                       0188
FOR I← 8 STEP -1 UNTIL 1 DO                                                          0191
BEGIN A[I]←Y MOD 16;  A[I+8]←Z MOD 16;                                               0193
Y←Y DIV 16; Z←Z DIV 16 END;                                                          0197
WRITE(PRINTER,FCONS,L3[STAKP],                                                       0201
FOR I←1 STEP 1 UNTIL 16 DO A[I])  END;                                               0207
IF M=6 THEN WRITE(PRINTER,FFIX,                                                      0214
U3[STAKP]DIV 2*24, L3[STAKP] MOD 16 DIV 4);                                          0218
GO TO FETCH;                                                                         0231
ORR:                                                                                 0231
L3[STAKP+1]←REAL(BOOLEAN(L3[STAKP+1])OR BOOLEAN(L3[STAKP]));                        0232
U3[STAKP+1]←REAL(BOOLEAN(U3[STAKP+1])OR BOOLEAN(U3[STAKP]));                        0235
GO TO POP1;                                                                          0238
SLC: FOR I ← 1 STEP 1 UNTIL M DO                                                     0239
BEGIN T←U3[STAKP]DIV 2*28;                                                           0240
U3[STAKP]←(U3[STAKP]MOD 2*28)×16 + L3[STAKP] DIV 2*28;                               0244
L3[STAKP]←(L3[STAKP]MOD 2*28)×16 + T END;                                            0254
GO TO FETCH;                                                                         0262
SRC: FOR I ← 1 STEP 1 UNTIL M DO                                                     0263
BEGIN T←U3[STAKP]MOD 16;                                                             0264
U3[STAKP]←U3[STAKP]DIV 16 + 2*28×(L3[STAKP]MOD 16);                                  0265
L3[STAKP]←L3[STAKP]DIV 16 + 2*28 × T END;                                            0272
GO TO FETCH;                                                                         0280
PCH:IF FLAG=1 THEN                                                                   0281
BEGIN PUNCH(PARITY+5×16); FLAG←PARITY←0 END;                                         0281
PUNCH(M); GO TO FETCH;                                                               0286
XEC:J←256×B+M; TIMES[J]←TIMES[J]+1;  CLOCK←CLOCK+1;                                  0287
S←SYLL[J];  M←S MOD 256;                                                             0293
B←S DIV 256 MOD 4;  N ← S DIV 1024 MOD 8;  T ← S DIV 8192;                           0295
GO TO S1[T+1];                                                                       0300
OVRFLO:M←10; GO TO ERR;                                                              0302
SYNTAX: M←20; GO TO ERR;                                                             0307
ERR:WRITE(PRINTER,FERR,M,PREG←PREG-1);                                               0308
TRACE;                                                                               0319
STAKP←SAVES; LOCP←SAVELP; LOCV←SAVELV;                                               0319
PREG←MODE←0;                                                                         0323
```

```
TAG←1;FLAG←0;BUFP←BUFB;BUFC←0;                                          0324
SCANP←BUFB; L3[SCANP]←200; SCANC←0;                                     0327
PARITY←0;                                                               0330
GO TO FETCH;                                                            0331
ST:U1[M]←U3[STAKP];L1[M]←L3[STAKP]; GO TO POP;                          0332
TST:U3[M]←U3[STAKP]; L3[M]←L3[STAKP]; GO TO POP1;                       0336
XCH:T←U3[STAKP];   U3[STAKP]←U3[STAKP+N-1]; U3[STAKP+N-1]←T;            0340
T←L3[STAKP];L3[STAKP]←L3[STAKP+N-1];L3[STAKP+N-1]←T;                    0346
GO TO FETCH;                                                            0352
GET:IF M=0 THEN                                                         0353
BEGIN U3[STAKP-1]←U3[STAKP+N-1];                                        0353
L3[STAKP-1]←L3[STAKP+N-1] END                                           0357
ELSE     BEGIN U3[STAKP-1]←U1[M];                                       0360
L3[STAKP-1]←L1[M]; END;                                                 0362
PUSH:STAKP←STAKP-1          ;                                           0364
IF STAKP<STAKPMIN THEN STAKPMIN←STAKP;                                  0366
IF STAKP≤BUFP THEN GO TO OVRFLO ELSE GO TO FETCH;                       0368
TGET: U3[STAKP-1]←U3[M];                                                0370
L3[STAKP-1]←L3[M];                                                      0372
GO TO PUSH;                                                             0374
INC: IF M=0 THEN L3[STAKP+N-1]←L3[STAKP+N-1]+1                          0374
ELSE L1[M]←L1[M]+1;                                                     0379
COMMENT FOR SIMPLICITY THE ABOVE STATEMENT ASSUMES NO CARRY             0382
    PROPAGATES INTO THE UPPER HALF OF THE WORD;                         0382
GO TO FETCH;                                                            0382
INX: X← ( IF M≠0 THEN L1[M] ELSE                                        0383
     IF N≠0 THEN L3[STAKP+N-1] ELSE                                     0386
     L3[STAKP])   MOD 256;                                              0389
IF M+N = 0 THEN GO TO POP1 ELSE                                         0391
GO TO FETCH;                                                            0392
SCMP:T←0; GO TO CMP1;                                                   0393
CMP:T←1;                                                                0395
CMP1:IF(J←L3[STAKP]DIV 2*20)≠0 THEN                                     0396
BEGIN COMPILE((34+J)×256); IF T≠0 THEN L1[J]←L1[J]-1 END;               0401
IF (J←L3[STAKP] DIV 2*16 MOD 16)≠0 THEN                                 0407
BEGIN COMPILE((34+J)×256); IF T≠0 THEN L1[J]←L1[J]-1 END;               0411
COMPILE(L3[STAKP]MOD 2*16 + M×256);                                     0417
IF T=0 THEN GO TO FETCH ELSE                                            0421
GO TO POP;                                                              0422
XT:J←1; GO TO EXIT;                                                     0423
XF:  J ← 0;                                                             0425
```

```
EXIT: Y←U3[STAKP]; Z←L3[STAKP];                                                0426
FOR I←1 STEP 1 UNTIL N DO                                                      0429
BEGIN T← U3[STAKP+I];U3[STAKP+I]←Y; Y←T;                                       0430
T←L3[STAKP+I]; L3[STAKP+I]←Z; Z←T END;                                         0434
N←1; PREG←Z; B←Y;                                                              0440
GO TO BRANCH;                                                                  0442
SEE: IF TAG=1 THEN                                                             0443
BEGIN COMMENT NOW WE SCAN THE NEXT CHARACTER OF THE SOURCE                      0443
PROGRAM.  MODE=3 MEANS GO TO NEXT NONBLANK CHARACTER.                          0444
MODE=2 MEANS TAKE THE NEXT CHARACTER EVEN IF IT IS BLANK.                      0444
MODE=1 MEANS GO TO THE NEXT PERIOD.  THE NORMAL SETTING IS                     0444
MODE=0, WHICH IS LIKE MODE=3 THEN IF THE CHARACTER IS A                        0444
LETTER THE WHOLE IDENTIFIER IS BUILT AND FOUND IN THE SYMBOL TABLE;            0444
DEFINE SCAN =   IF SCANC<8 THEN L3[SCANP] DIV 2*(4×SCANC) MOD 256              0444
                                                  START OF SEGMENT ********** 0032
ELSE U3[SCANP] DIV 2*(4×SCANC-32) MOD 256 #;                                   0000
LABEL LOOP,LOOP1;                                                              0000
LOOP:CHAR←SCAN;                                                                0000
SCANC←SCANC+2; IF SCANC=16 THEN BEGIN SCANC←0;SCANP←SCANP+1 END;                0011
IF CHAR=200 THEN                                                               0015
BEGIN COMMENT  THE END OF AN INPUT RECORD HAS BEEN SENSED;                      0016
IF FLAG=1 THEN BEGIN PUNCH(PARITY+5×16);FLAG←00 ;PARITY←0 END;                  0017
SAVES←STAKP; SAVELP←LOCP; SAVELV←LOCV;                                         0022
COMMENT AT THIS POINT CODE WOULD BE INSERTED TO PUNCH THE CONTENTS OF          0025
BLOCK3, WDS FROM BUFB TO CHAR BUFC OF BUFP, ONTO PAPER TAPE;                    0025
COMMENT NOW WE READ ONE MORE LINE OF INPUT TEXT, WHICH                         0025
COULD BE EITHER FROM PAPER TAPE OR KEYBOARD;                                   0025
MYREAD;                                                                        0025
WRITE(PRINTER,FCARD,FOR I←1 STEP 1 UNTIL 80 DO TRANS[COL[I]],CLOCK);           0025
FOR I ← 0 STEP 1 UNTIL 9 DO                                                    0039
 BEGIN J←8×I+1;                                                                0040
U3[BUFB+I]←(((COL[J+7]×256+COL[J+6])×256+COL[J+5])×256+COL[J+4];               0041
L3[BUFB+I]←(((COL[J+3]×256+COL[J+2])×256+COL[J+1])×256+COL[J  ];               0051
END;                                                                           0060
BUFP←BUFB+11; BUFC←0;                                                          0063
U3[BUFP-1]←0; L3[BUFP-1]←200;                                                  0065
SCANP←BUFB;SCANC←0;                                                            0068
GO TO LOOP END IO PROCESS;                                                     0070
IF MODE=1 THEN BEGIN IF CHAR≠149 THEN GO TO LOOP END                           0070
ELSE IF MODE≠2 THEN BEGIN                                                      0073
     IF CHAR=64 THEN GO TO LOOP                                                0075
```

```
ELSE IF MODE = 0 THEN BEGIN                                                    0076
 IF CHAR≥177 OR CHAR≥160 AND CHAR≤170 THEN                                     0078
 BEGIN COMMENT BUILDING AN IDENTIFIER;                                         0082
A[0]←CHAR-160;  J←1;                                                           0082
FOR I←1 STEP 1 UNTIL 5 DO A[I]←0;                                              0085
LOOP1:I←SCAN; IF I≠200 AND I≥177 OR I≥160 AND I≤170 OR I≥128 AND I<138         0089
THEN BEGIN IF J≤5 THEN A[J] ← I;  J←J+1;                                       0105
SCANC←SCANC+2; IF SCANC=16 THEN BEGIN SCANC←0; SCANP←SCANP+1 END;               0110
GO TO LOOP1 END;                                                               0115
J←LOOKUP;                                                                      0115
T←U3[J] DIV 2*29;                                                              0116
IF T=0 THEN CHAR←L3[J] DIV 256 MOD 256                                         0121
ELSE BEGIN CHAR←T+100; TLOC←L3[J] MOD 256;                                     0124
SPOT←J;                                                                        0129
TSIZ←L3[J] DIV 256 MOD 256 END;                                                0130
END IDENTBUILD;                                                                0133
END;                                                                           0133
END;                                                                           0133
TAG←0;                                                                         0133
END;                                                                           0133
```

0032 IS 0135 LONG, NEXT SEG 0024

```
MODE←0;                                                                        0445
IF M=CHAR THEN BEGIN TAG←1;J←1 END ELSE J←0;                                   0446
GO TO BRANCH;                                                                  0450
GE: J← IF L3[STAKP] MOD 256 ≥ M THEN 1 ELSE 0; GO TO BRANCH;                   0451
EQ: J← IF L3[STAKP] MOD 256 = M THEN 1 ELSE 0; GO TO BRANCH;                   0455
BRANCH: IF (B+J) MOD 2 = 0 THEN BEGIN IF B≥2 THEN GO TO SYNTAX ELSE            0459
SKIP:  PREG←PREG+1 END;                                                        0462
GO TO POP;                                                                     0464
CALL:U3[STAKP-1]←N; L3[STAKP-1]←PREG;                                          0464
PREG←256×B+M; GO TO PUSH;                                                      0468
JMP:PREG←256×B+M; GO TO POP;                                                   0470
POP1: N←1;                                                                     0473
POP:STAKP←STAKP+N; GO TO FETCH;                                                0474
SET:U3[SPOT]←U3[SPOT]MOD 2*29 + TYP×2*29;                                      0476
L3[SPOT]←L3[SPOT]DIV 2*16 × 2*16  +  256×TSIZ + TLOC;                          0487
STDISP(SPOT);                                                                  0495
GO TO FETCH;                                                                   0496
MASK:Y←L3[L3[STAKP]];                                                          0497
Z←L3[STAKP+2];                                                                 0498
N←0;COMMENT BECAUSE SKIP GOES TO POP;                                          0499
```

```
FOR I←0 STEP 1 UNTIL 7 DO BEGIN R[I]←Y MOD 16;  A[I]←Z MOD 16;                0500
    Y← Y DIV 16; Z ← Z DIV 16 END;                                            0505
Y←U3[L3[STAKP]]; Z←U3[STAKP+2];                                               0510
FOR I←8 STEP 1 UNTIL 15 DO BEGIN R[I]←Y MOD 16; A[I]← Z MOD 16;               0513
    Y← Y DIV 16; Z ← Z DIV 16 END;                                            0517
B←0;   IF A[15] ≠ R[15] THEN GO TO SKIP;                                      0522
FOR I←0 STEP 1 UNTIL 14 DO  BEGIN IF A[I]≠R[I]THEN GO TO MASK1 END;           0524
GO TO FETCH;                                                                  0530
MASK1:IF A[I]=1 THEN GO TO FETCH;                                             0530
IF R[I]≠1 THEN GO TO  SKIP;                                                   0532
A[15]←1;                                                                      0534
MASK2:R[I]←A[I];                                                              0535
I←I+1; IF A[I]≠1 THEN GO TO MASK2;                                            0537
Y←Z←0; FOR I ← 7 STEP -1 UNTIL 0 DO BEGIN                                     0540
Y←16×Y+R[I]; Z←16×Z+R[I+8] END;                                               0543
U3[L3[STAKP]]←Z;  L3[L3[STAKP]]←Y;                                            0549
GO TO FETCH;                                                                  0552
HLT:WRITE(PRINTER[PAGE]);                                                     0553
FOR I←0 STEP 8 UNTIL 1008 DO                                                  0556
WRITE(PRINTER,TOTALS,I,FOR J←0 STEP 1 UNTIL 7 DO TIMES[I+J]);                 0558
        FOR I←0 STEP 1 UNTIL 255 DO HELP[I]←0;  X←0;                          0573
        FOR I←0 STEP 1 UNTIL 1022 DO                                          0579
        BEGIN X←X+TIMES[I];  HELP[J←SYLL[I]DIV 256]←HELP[J]+TIMES[I]END;      0580
        FOR I←0 STEP 8 UNTIL 248 DO                                           0587
        WRITE(PRINTER,TOTALS,I,FOR J←0 STEP 1 UNTIL 7 DO HELP[I+J]);          0588
        WRITE(PRINTER,TOTALS,0,BUFFMAX,STAKPMIN,X);                           0603
        END;                                                                  0616
                                                  0024 IS 0620 LONG, NEXT SEG 0002
        END.                                                                  0046
                                                  0002 IS 0049 LONG, NEXT SEG 0001

EXP IS SEGMENT NUMBER 0033,PRT ADDRESS IS 0202
LN IS SEGMENT NUMBER 0034,PRT ADDRESS IS 0201
OUTPUT(W) IS SEGMENT NUMBER 0035,PRT ADDRESS IS 0147
BLOCK CONTROL IS SEGMENT NUMBER 0036,PRT ADDRESS IS 0005
INPUT(W) IS SEGMENT NUMBER 0037,PRT ADDRESS IS 0143
X TO THE I IS SEGMENT NUMBER 0038,PRT ADDRESS IS 0203
GO TO SOLVER  IS SEGMENT NUMBER 0039,PRT ADDRESS IS 0156
ALGOL WRITE   IS SEGMENT NUMBER 0040,PRT ADDRESS IS 0014
ALGOL READ    IS SEGMENT NUMBER 0041,PRT ADDRESS IS 0015
ALGOL SELECT  IS SEGMENT NUMBER 0042,PRT ADDRESS IS 0016

                                                  0001 IS 0002 LONG, NEXT SEG 0000
```

```
                                                                0043 IS 0069 LONG, NEXT SEG 0000
NUMBER OF ERRORS DETECTED = 000.  COMPILATION TIME = 0057 SECONDS.
PRT SIZE=0170;TOTAL SEGMENT SIZE=02147 WORDS;DRUM STORAGE REQ.=02373 WORDS;NO. SEGS.=0043.
ESTIMATED CORE STORAGE REQUIREMENT = 06919 WORDS.
```

```
LABEL   000000000LINE    001670677COMPILE KNUTH/SELL ALGOL                                    ALGOL   /KNUTH
```

LABEL 000000000PRINTER01670677COMPILE KNUTH/SELL ALGOL KNUTH /SELL

```
0: 0 0 0    0     /HLT    EQU          B000000000 HALT                                    OP CODE
0: 0 0 0    1     /LOD    EQU          B000000001 LOAD                                    TABLE FOR
0: 0 0 0    2     /ADD    EQU          B000000010 ADD                                     ASSEMBLER
0: 0 0 0    3     /SUB    EQU          B000000011 SUBTRACT
0: 0 0 0    4     /TEN    EQU          B000000100 TIMES TEN
0: 0 0 0    5     /ORR    EQU          B000000101 LOGICAL ORR
0: 0 0 0    6     /SLC    EQU          B000000110 SHIFT LEFT CIRCULAR
0: 0 0 0    7     /PCH    EQU          B000000111 PUNCH
0: 0 0 0    8     /XEC    EQU          B000001000 EXECUTE
0: 0 0 0   12     /TST    EQU          B000001100 T A BLE STORE
0: 0 0 0   13     /TGET   EQU          B000001101 TABLE GET
0: 0 0 0   14     /SET    EQU          B000001110 SET IDENTIFIER TABLE ENTRY
0: 0 0 0   15     /MASK   EQU          B000001111 COMPARE MASKS
0: 0 0 0   16     /SCMP   EQU          B000010000 SPECIAL COMPILE
0: 0 0 0   17     /XOR    EQU          B000010001 EXCLUSIVE OR TO PARITY
0: 0 0 0   18     /SRC    EQU          B000010010 SHIFT RIGHT CIRCULAR
0: 0 0 0   32     /SEE    EQU          B001000000 SEE
0: 0 0 0   33     /NSEE   EQU          B001000001 NOT SEE
0: 0 0 0   34     /MSEE   EQU          B001000010 MUST SEE
0: 0 0 0   35     /MNSEE  EQU          B001000011 MUST NOT SEE
0: 0 0 0   64     /GE     EQU          B010000000 GREATER OR EQUAL
0: 0 0 0   65     /NGE    EQU          B010000001 NOT GREATER OR EQUAL
0: 0 0 0   66     /MGE    EQU          B010000010 MUST BE GREATER OR EQUAL
0: 0 0 0   67     /MNGE   EQU          B010000011 MUST NOT BE GREATER OR EQUAL
0: 0 0 0   96     /EQ     EQU          B011000000 EQUAL
0: 0 0 0   97     /NEQ    EQU          B011000001 NOT EQUAL
0: 0 0 0   98     /MEQ    EQU          B011000010 MUST BE EQUAL
0: 0 0 0   99     /MNEQ   EQU          B011000011 MUST NOT BE EQUAL
0: 0 0 0  128     /CALL   EQU          B100000000 CALL
0: 0 0 0  132     /NCALL  EQU          B100000100 NEGATIVE CALL
0: 0 0 0  136     /MCALL  EQU          B100001000 MUST CALL
0: 0 0 0  140     /MNCAL  EQU          B100001100 MUST BE NEGATIVE CALL
0: 0 0 0  160     /JMP    EQU          B101000000 JUMP
0: 0 0 0  192     /GET    EQU          B110000000 GET
0: 0 0 0  193     /ST     EQU          B110000001 STORE
0: 0 0 0  194     /INC    EQU          B110000010 INCREMENT
0: 0 0 0  195     /XCH    EQU          B110000011 EXCHANGE
0: 0 0 0  224     /INX    EQU          B111000000 INDEX
0: 0 0 0  225     /CMP    EQU          B111000001 COMPILE
0: 0 0 0  226     /XT     EQU          B111000010 EXIT TRUE
0: 0 0 0  227     /XF     EQU          B111000011 EXIT FALSE                    END OF OP CODE TABLE

0: 0 0 0  100     PARITY  EQU          100        OUTPUT TAPE DIGIT PARITY                LOCATIONS FOR
0: 0 0 0  110     LOCP    EQU          110        LOCATION OF NEXT COMPILED INST       COMMUNICATION
0: 0 0 0  120     TYP     EQU          120        TYPE TO STORE IN NEXT NEW IDENTIFIER          WITH
0: 0 0 0  130     LOCV    EQU          130        LOCATION OF NEXT DATA WORD                 MICRO-CODE
0: 0 0 0  140     SIZ     EQU          140        SIZE TO STORE IN NEXT NEW IDENTIFIER     ROUTINES
0: 0 0 0  150     MODE    EQU          150        SCANNING MODE
0: 0 0 0  160     CHAR    EQU          160        CURRENT CHARACTER SCANNED
0: 0 0 0  170     TSIZ    EQU          170        SIZE OF CURRENT IDENTIFIER
0: 0 0 0  180     TLOC    EQU          180        LOCATION OF CURRENT IDENTIFIER
0: 0 0 0  190     NMASKS  EQU          190        NUMBER OF MASKS IN OBJECT PROGRAM
0: 0 0 0    0     XREQ    EQU          0          NUMBER OF REQUESTS FOR INDEX REGISTER
                                                    (LOCATIONS USED ARE XREQ+1,+5,+9,+13)
0: 0 0 0  105     ASTATE  EQU          105        STATE OF ACCUMULATOR(EMPTY,FULL,STORED)
0: 0 0 0  115     TEMP    EQU          115        TEMPORARY STORAGE
0: 0 0 0  125     HOLD    EQU          125        TEMPORARY STORAGE                         WORDS USED
0: 0 0 0  135     ARG     EQU          135        LOCATION OF COMPILED ARGUMENT               IN MICRO-
0: 0 0 0  145     SPEC    EQU          145        TEMPORARY STORAGE                        CODE BLOCK,
0: 0 0 0  155     TEMP1   EQU          155        TEMPORARY STORAGE                      BUT NOT USED
0: 0 0 0    1     XCONT   EQU          1          CONTENTS OF INDEX REG                BY MICRO-CODE
0: 0 0 0    2     XCONT1  EQU          2          XCONT+1                                    ROUTINES
                                                    (LOCATIONS USED ARE XCONT+1,+5,+9,+13)
0: 0 0 0    0     "ADD    EQU          0             INTERNAL CODES FOR CHARACTERS AND
0: 0 0 0    1     "ADVAN  EQU          1                          RESERVED WORDS
0: 0 0 0    2     "ALPHA  EQU          2
0: 0 0 0    3     "ALARM  EQU          3
0: 0 0 0    4     "BEGIN  EQU          4
0: 0 0 0    5     "CALL   EQU          5
0: 0 0 0    6     "CLEAR  EQU          6
0: 0 0 0    7     "CODE   EQU          7
0: 0 0 0    8     "END    EQU          8
0: 0 0 0    9     "ENTER  EQU          9
0: 0 0 0   10     "GO     EQU          10
0: 0 0 0   11     "IF     EQU          11
0: 0 0 0   12     "KEY    EQU          12
0: 0 0 0   13     "NUMER  EQU          13
0: 0 0 0   14     "OPEN   EQU          14
0: 0 0 0   15     "PAGE   EQU          15
0: 0 0 0   16     "PRINT  EQU          16
0: 0 0 0   17     "SET    EQU          17
```

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0: 0 0 0   18     "SUBTR  EQU             18
0: 0 0 0   19     "TYPE   EQU             19
0: 0 0 0   20     "UNLES  EQU             20
0: 0 0 0   50     "FROM   EQU             50
0: 0 0 0   51     "LEFT   EQU             51
0: 0 0 0   52     "RIGHT  EQU             52
0: 0 0 0   53     "NEGAT  EQU             53
0: 0 0 0   54     "OVRFL  EQU             54
0: 0 0 0   55     "ROUTN  EQU             55
0: 0 0 0   56     "LOOP   EQU             56
0: 0 0 0   57     "TO     EQU             57
0: 0 0 0   58     "BY     EQU             58
0: 0 0 0  100     ID0     EQU             100       IDENTIFIER TYPE 0 = RESERVED WORD
0: 0 0 0  101     ID1     EQU             101       IDENTIFIER TYPE 1 = NUMERIC VARIABLE
0: 0 0 0  102     ID2     EQU             102       IDENTIFIER TYPE 2 = 1 WORD ALPHA VARIABLE
0: 0 0 0  103     ID3     EQU             103       IDENTIFIER TYPE 3 = MULTIWORD ALPHA VARIABLE
0: 0 0 0  104     ID4     EQU             104       IDENTIFIER TYPE 4 = SUBROUTINE NAME
0: 0 0 0  105     ID5     EQU             105       IDENTIFIER TYPE 5 = SUBROUTINE PARAMETER
0: 0 0 0  106     ID6     EQU             106       IDENTIFIER TYPE 6 = LABEL
0: 0 0 0  128     CHAR0   EQU             128       DIGIT ZERO
0: 0 0 0  129     CHAR1   EQU             129       DIGIT ONE
0: 0 0 0  130     CHAR2   EQU             130
0: 0 0 0  138     CHAR$   EQU             138
0: 0 0 0  141     CHAR#   EQU             141
0: 0 0 0  142     CHAR)   EQU             142
0: 0 0 0  143     CHARCR  EQU             143       CREDIT SYMBOL
0: 0 0 0  144     CHAR/   EQU             144
0: 0 0 0  147     CHAR=   EQU             147
0: 0 0 0  148     CHAR,   EQU             148
0: 0 0 0  149     CHAR.   EQU             149
0: 0 0 0  150     CHAR;   EQU             150
0: 0 0 0  151     CHAR-   EQU             151
0: 0 0 0  154     CHAR"   EQU             154
0: 0 0 0  155     CHAR+   EQU             155
0: 0 0 0  158     CHAR:   EQU             158
0: 0 0 0  163     CHARS   EQU             163       LETTER S
0: 0 0 0  168     CHARX   EQU             168
0: 0 0 0  170     CHARZ   EQU             170
0: 0 0 0  171     CHAR%   EQU             171       CENTS SIGN
0: 0 0 0  173     CHAR*   EQU             173
0: 0 0 0  174     CHAR(   EQU             174
0: 0 0 0  176     CHAR>   EQU             176        LOZENGE
0: 0 0 0  177     CHARA   EQU             177
0: 0 0 0  178     CHARB   EQU             178
0: 0 0 0  180     CHARD   EQU             180
0: 0 0 0  185     CHARI   EQU             185
0: 0 0 0  200     INVALD  EQU             200       IMPOSSI BLE CHARACTER

0: 0 0 0    0     =STOP   EQU             B000000000        OBJECP PROGRAM OP CODES
0: 0 0 0    1     =SKL    EQU             B000000001
0: 0 0 0    2     =SKT    EQU             B000000010
0: 0 0 0    4     =ALARM  EQU             B000000100
0: 0 0 0    4     =EX-SK  EQU             B000000100 DIFF. BETWEEN EXECUTE AND SKIP
0: 0 0 0    8     =SKA    EQU             B000001000
0: 0 0 0   10     =SKK    EQU             B000001010
0: 0 0 0   12     =EXA    EQU             B000001100
0: 0 0 0   32     =BRU0   EQU             B001000000
0: 0 0 0   33     =BRU1   EQU             B001000001
0: 0 0 0   36     =BRU01  EQU             B001001000  BRU TO 0.000.1
0: 0 0 0   17     =LIR    EQU             B000010001
0: 0 0 0   64     =RETPT  EQU             B010000000
0: 0 0 0   67     =LKBR   EQU             B010000011
0: 0 0 0   68     =LIB    EQU             B010000100
0: 0 0 0   69     =SIB    EQU             B010000101
0: 0 0 0   71     =PROT   EQU             B010000111
0: 0 0 0   72     =RETRN  EQU             B010001000
0: 0 0 0   75     =PAL    EQU             B010001011
0: 0 0 0   77     =LDES   EQU             B010001101
0: 0 0 0   78     =CLRN   EQU             B010001110
0: 0 0 0   81     =LUR    EQU             B010100001
0: 0 0 0   82     =LBR    EQU             B010100010
0: 0 0 0  129     =SRJ    EQU             B100000001
0: 0 0 0  139     =SRR    EQU             B100001011
0: 0 0 0  151     =NERCM  EQU             B100101111
0: 0 0 0  152     =TKM    EQU             B100110000
0: 0 0 0  153     =TK     EQU             B100110011
0: 0 0 0  163     =LTKMR  EQU             B101000011
0: 0 0 0  164     =LSR    EQU             B101001000
0: 0 0 0  165     =INK    EQU             B101001011
0: 0 0 0  167     =TAIR   EQU             B101001111
0: 0 0 0  169     =PA     EQU             B101010011
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0:  0  0  0  185     =PC-P   EQU                 B10111001
0:  0  0  0  193     =LPNR   EQU                 B11000001
0:  0  0  0  195     =PKA    EQU                 B11000011
0:  0  0  0  196     =LPKR   EQU                 B11000100
0:  0  0  0  199     =PKB    EQU                 B11000111
0:  0  0  0  202     =PNS-   EQU                 B11001010
0:  0  0  0  208     =ADK    EQU                 B11010000
0:  0  0  0  210     =SUK    EQU                 B11010010
0:  0  0  0  211     =NOP    EQU                 B11010011
0:  0  0  0  217     =TRM    EQU                 B11011001
0:  0  0  0  221     =TRA    EQU                 B11011101
0:  0  0  0  225     =ADA    EQU                 B11100001
0:  0  0  0  227     =SUA    EQU                 B11100011
0:  0  0  0  229     =MUL    EQU                 B11100101
0:  0  0  0  233     =ADM    EQU                 B11101001
0:  0  0  0  235     =SUM    EQU                 B11101011
0:  0  0  0  237     =DIV    EQU                 B11101101
0:  0  0  0  245     =AL     EQU                 B11110101
0:  0  0  0  249     =OC     EQU                 B11111001
0:  0  0  0  252     =POS    EQU                 B11111011
0:  0  0  0  252     =LLLR   EQU                 B11111100

0:  4  0  3  255/    RSTART  CALL      CLEARX              BEGINNING OF PROGRAM
1:  5  0  3  255/            JMP       PROGC               OR RESTART POINT AFTER ERROR DETECTED

2:  4  0  3  255/    EOS1    CALL      FIXUP               INSERT BRU TO LOCP FOR CONDITION PREFIX
3:  3  0  0    2     EOS     EQ                  2       END OF STATEMENT
4:  5  1  0    2             JMP     1 EOS1              WAS THERE AN INCOMPLETE CONDITION PREFIX?
5:  1  0  2  149     EOS2    MSEE      CHAR.               STATEMENT MUST END WITH "."

6:  0  0  1    0     PROGC   LOD                 0       PROGRAM COMPONENT
7:  6  1  1  140             ST      1 SIZ
8:  0  0  1    6             LOD                 6       SET SIZ,TYP SO NEW IDENTIFIER TREATED AS LA BEL
9:  6  1  1  120             ST      1 TYP
10: 1  0  0  176             SEE       CHAR>             LOOK FOR LOZENGE
11: 5  0  3  255/            JMP       COMENT            IF SO, WE HAVE A COMMENT
12: 1  0  0  106             SEE       ID6               LOOK FOR LABEL
13: 5  0  3  255/            JMP       LABEL
14: 0  0  1    0     STATE   LOD                 0       BEGINNING OF STATEMENT
15: 6  0  1  105             ST        ASTATE            MARK ACCUMULATOR EMPTY
16: 1  0  1  141             NSEE      CHAR#
17: 5  1  3  255/            JMP     1 STATE1
18: 1  0  0  141             SEE       CHAR#             RETURN POINT SENSED
19: 0  0  2    1             ADD                 1       MAJOR RETURN POINT
20: 7  1  1   64             CMP     1 =RETPT
21: 4  0  0    0/    .3      CALL      CLEARX            MARK INDEX REGISTER CONTENTS UNDEFINED
22: 5  0  0   17/            JMP       STATE1
23: 1  0  2  158     LABEL   MSEE      CHAR:
24: 6  0  0  170             GET       TSIZ
25: 3  1  2    0             MEQ     1                   0       LABEL MUST NOT HAVE OCCURRED BEFORE
26: 0  0  1   32             LOD       =BRUO
27: 6  0  1  170             ST        TSIZ              SET SIZ#0, INDICATING A DEFINED LABEL
28: 0  3  2    0             SET
29: 0  1  2    2             SLC                 2
30: 6  0  0  110             GET       LOCP              COMPILE BRU INSTRUCTION INTO DATA LOCATION
31: 0  1  1    0             ORR                         FOR THIS LABEL
32: 6  0  0  180             GET       TLOC
33: 4  0  3  255/            CALL      PCHCN1
34: 5  1  0    0             JMP     1 RSTART            MARK INDEX REGISTER CONTENTS UNDEFINED
35: 4  0  3  255/    STATE1  CALL      POSITN            IS THERE A POSITION PREFIX?
36: 5  0  0   14             JMP       STATE
37: 0  0  1    0     .1      LOD                 0
38: 1  0  0  173             SEE       CHAR*
39: 0  0  2    1             ADD                 1       ASTERISK (PROTECTION INDICATOR) SENSED
40: 1  0  1  200             NSEE      INVALD
41: 6  0  0  160             GET       CHAR              GET FIRST CHARACTER OF BASIC STATEMENT
42: 2  0  3   25             MNGE                25      ITS CODE MUST BE LESS THAN 25
43: 7  1  0    0             INX     1
44: 1  0  2    0             MSEE                0       THE CHARACTER IS NOW "SEEN"
45: 7  0  0    0             INX                         NOW JUMP TO APPROPRIATE ROUTINE, POSSIBLY
46: 5  0  3  255/            JMP       .2                  LEAVING THE PROTECTION FLAG ON THE STACK
47: 5  0  3  255/    .2      JMP       ADD
48: 5  0  3  255/            JMP       ADVANC
49: 5  1  3  255/            JMP     1 ALPHA
50: 5  0  3  255/            JMP       ALARM
51: 5  1  3  255/            JMP     1 BEGIN
52: 5  1  3  255/            JMP     1 CALL
53: 5  1  3  255/            JMP     1 CLEAR
54: 5  1  3  255/            JMP     1 CODE
55: 5  1  3  255/            JMP     1 END
56: 5  1  3  255/            JMP     1 ENTER
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 57: 5 1 3 255/          JMP    1 GO
 58: 5 0 3 255/          JMP      IF
 59: 5 1 3 255/          JMP    1 KEY
 60: 5 1 3 255/          JMP    1 NUMERC
 61: 5 1 3 255/          JMP    1 OPEN
 62: 5 0 3 255/          JMP      PAGE
 63: 5 1 3 255/          JMP    1 PRINT
 64: 5 0 3 255/          JMP      SET
 65: 5 0 3 255/          JMP      SUBTRA
 66: 5 1 3 255/          JMP    1 TYPE
 67: 5 0 3 255/          JMP      UNLESS

 68: 1 0 1 200  DIGIT    NSEE     INVALD        SUBROUTINE FOR DIGITS
 69: 6 0 0 160           GET      CHAR          LOOK AT NEXT CHARACTER
 70: 2 0 0 128           GE       CHAR0
 71: 2 0 0 138           GE       CHAR9
 72: 5 1 3 255/          JMP    1 XFALSE        IT IS NOT A DIGIT: EXIT FALSE
 73: 7 1 0   0           INX    1               IT IS A DIGIT
 74: 1 0 0   0           SEE              0     "SEE" IT
 75: 0 0 3 128           SUB      CHAR0
 76: 7 1 2   0           XT     1               EXIT TRUE, WITH NUMERIC EQUIVALENT ON STACK

 77: 4 1 0  68  CONST    NCALL    DIGIT         LOOK FOR SMALL CONSTANT
 78: 7 0 3   0           XF                     EXIT FALSE IF NO DIGIT SEEN
 79: 4 1 0  68  .1       NCALL    DIGIT         OTHERWISE SCAN SEQUENCE OF DIGITS
 80: 7 1 2   0           XT     1               EXIT TRUE WITH BINARY VALUE OF CONSTANT
 81: 6 2 3   0           XCH    2
 82: 0 1 0   0           TEN                    CONVERT TO BINARY 8-BIT VALUE
 83: 7 0 0   0           INX
 84: 0 0 2   0           ADD
 85: 5 0 0  79           JMP      .1

 86: 1 0 2 174  ALPHA    MSEE     CHAR(         ALPHA VARIABLE DECLARATION
 87: 4 2 0  77           MCALL    CONST         GET MAXIMUM NUMBER OF CHARACTERS, C
 88: 1 0 2 142           MSEE     CHAR)
 89: 7 1 0   0           INX    1
 90: 0 0 2   0           ADD                    2C
 91: 0 4 2   1           SRC              1     C/8
 92: 6 1 2   0           INC    1               C/8+1
 93: 0 0 1   2           LOD              2
 94: 6 2 0   0           GET    2
 95: 3 1 1   1           NEQ    1         1
 96: 0 0 2   1           ADD              1     SET TYPE 3 IF C IS 8 OR MORE
 97: 6 1 1 120           ST     1 TYP           OTHERWISE TYPE 2
 98: 5 0 3 255/          JMP      DECL
 99: 0 0 1   1  NUMERC   LOD              1     NUMERIC VARIABLE DECLARATION
100: 6 0 1 120           ST       TYP
101: 6 1 1 140  DECL     ST     1 SIZ           STORE DECLARED SIZE
102: 7 0 0 120  VNL      INX      TYP           VARIABLE NAME LIST ON OUTER LEVEL
103: 1 0 2 100           MSEE     IDO
104: 1 0 1 174           NSEE     CHAR(         IS VARIABLE AN ARRAY?
105: 5 0 3 255/          JMP      .1
106: 6 0 0 120           GET      TYP           IF SO, IT MUST NOT BE A LONG ALPHA VARIABLE
107: 3 1 3   3           MNEQ   1         3
108: 4 2 0  77           MCALL    CONST
109: 6 1 1 170           ST     1 TSIZ          ADJUST ITS SIZE
110: 1 0 2 142           MSEE     CHAR)
111: 6 0 0 130  .1       GET      LOCV
112: 7 0 0 170           INX      TSIZ
113: 0 0 3 255           SUB              255   ADJUST STORAGE ALLOCATION CONTROL
114: 6 0 1 130           ST       LOCV
115: 0 0 2   1           ADD              1
116: 6 1 1 180           ST     1 TLOC
117: 0 3 2   0           SET
118: 1 0 0 147           SEE      CHAR=         LOOK FOR EQUIVALENCE DECLARATION
119: 4 0 3 255/          CALL     VNL1
120: 1 0 0 148           SEE      CHAR,
121: 5 0 0 102           JMP      VNL
122: 3 0 3   2  EOD      MNEQ             2     END OF DECLARATION   (THE DECLARATION MUST NOT
123: 5 0 0   5           JMP      EOS2                HAVE BEEN PRECEDED BY A CONDITION PREFIX.)

124: 6 0 0 130  VNL1     GET      LOCV          VARIABLE NAME LIST FOR EQUIVALENCES
125: 6 0 0 180           GET      TLOC          (THIS IS LIKE VNL EXCEPT THAT STORAGE IS
126: 6 1 1 130           ST     1 LOCV                ALLOCATED UPWARDS INSTEAD OF
127: 0 0 1   0           LOD              0           DOWNWARDS)
128: 1 0 0 174           SEE      CHAR(
129: 0 0 2   1           ADD              1
130: 7 0 0 120  .3       INX      TYP
131: 1 0 2 100           MSEE     IDO
132: 1 0 1 174           NSEE     CHAR(
133: 5 0 3 255/          JMP      .1
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134: 6 0 0 120           GET     TYP
135: 3 1 3   3           MNEQ  1          3
136: 4 2 0  77           MCALL   CONST
137: 6 1 1 170           ST    1 TSIZ
138: 0 3 2   0           SET
139: 1 0 2 142           MSEE    CHAR)
140: 6 0 0 170    .1     GET     TSIZ
141: 7 0 0 130           INX     LOCV
142: 0 0 2   1           ADD               1
143: 6 1 1 130           ST    1 LOCV
144: 1 0 0 147           SEE     CHAR=
145: 4 0 0 124           CALL    VNL1
146: 3 0 0   0           EQ                0
147: 5 1 3 255/          JMP   1 .2
148: 1 0 0 148           SEE     CHAR,
149: 5 0 0 130           JMP     .3
150: 1 1 2 142           MSEE  1 CHAR)
151: 6 1 1 130    .2     ST    1 LOCV            RESTORE SETTING OF LOCV
152: 7 0 2   0           XT

153: 1 0 0 101    NUMVAR SEE     ID1               NUMERIC VARIABLE
154: 5 0 3 255/          JMP     NVAR1             NUMERIC IDENTIFIER SEEN
155: 1 0 1 105    NVAR2  NSEE    ID5               IF NOT, LOOK FOR PARAMETER IDENTIFIER
156: 7 0 3   0    XFALSE XF                        OTHERWISE EXIT FALSE
157: 4 0 3 255/   NVAR4  CALL    FINDX             FIND INDEX REGISTER FOR PARAMETER ADDRESS
158: 5 0 3 255/          JMP     .1                JUMP IF IN INDEX REGISTER ALREADY
159: 6 0 0 180           GET     TLOC
160: 7 1 1  67           CMP   1 =LKBR             COMPILE CODE TO LOAD THE INDEX REGISTER
161: 7 0 1  68           CMP     =LIB
162: 0 1 2   5    .1     SLC               5       MARK ADDRESS AS ZERO PLUS INDEXING
163: 5 0 3 255/          JMP     NVAR3             LOOK FOR INDEX
164: 6 0 0 180    NVAR1  GET     TLOC
165: 1 0 1 174    NVAR3  NSEE    CHAR(
166: 7 1 2   0           XT    1                 IF NO INDEX, EXIT TRUE (WITH ADDRESS ON STACK)
167: 4 1 0 153           NCALL   NUMVAR            INDEXED VARIABLE:  DOES THE INDEX START WITH A
168: 5 0 3 255/          JMP     .1                  NUMERIC VARIABLE? IF NOT, MUST BE CONSTANT.
169: 6 1 1 180           ST    1 TLOC              IF SO, PUT THE VARIABLE VALUE INTO AN INDEX
170: 4 0 0 157/          CALL    FINDX                 REGISTER
171: 5 0 3 255/          JMP     .2                JUMP IF IN INDEX REGISTER ALREADY
172: 4 0 3 255/          CALL    FREEA             STORE ACCUMULATOR IF FULL
173: 6 0 0 180           GET     TLOC
174: 7 1 1 221           CMP   1 =TRA
175: 7 0 1 167           CMP     =TAIR             PUT QUZNTITY INTO INDEX REGISTER
176: 0 1 2   4    .2     SLC               4       MARK THE ADDRESS AS INDEXED
177: 0 1 1   0           ORR
178: 1 0 0 155           SEE     CHAR+             DOES THE INDEX HAVE THE FORM VAR+CONST?
179: 5 0 0 168/          JMP     .1
180: 1 0 1 151           NSEE    CHAR-             OR VAR-CONST?
181: 5 0 3 255/          JMP     .9
182: 4 2 0  77           MCALL   CONST
183: 7 0 0   0           INX
184: 0 0 3   0           SUB               0       SUBTRACT CONST FROM ADDRESS (MOD 256)
185: 5 0 0 181/          JMP     .9
186: 4 2 0  77    .1     MCALL   CONST
187: 7 0 0   0           INX
188: 0 0 2   0           ADD               0       ADD CONSTANT TO ADDRESS (MOD 256)
189: 1 0 2 142    .9     MSEE    CHAR)
190: 0 0 3   1           SUB               1       SUBTRACT ONE, SINCE INDEX IS RELATIVE TO ZERO
191: 7 1 2   0           XT    1                   EXIT TRUE, WITH ADDRESS OF VARIABLE ON STACK

192: 4 0 0 153    PRIMRY CALL    NUMVAR            PRIMARY:GIVES 2 OUTPUTS IF A PRIMARY IS FOUND
193: 5 0 3 255/          JMP     .1                LOOK FOR NUMERIC VARIA BLE
194: 4 1 0  68           NCALL   DIGIT             OR DIGIT
195: 7 0 3   0           XF                        IF NOT, EXIT FALSE
196: 4 0 0  68           CALL    DIGIT             IF SO8 CHECK FOR MORE DIGITS
197: 5 0 3 255/          JMP     .2
198: 0 0 1   1           LOD               1       EXIT TRUE, CASE 1: A ONE-DIGIT CONSTANT K.
199: 7 2 2   0           XT    2                       STACK CONTAINS 1 AND K.
200: 6 2 3   0    .2     XCH   2
201: 0 1 2   1           SLC               1       MORE DIGITS, FORM BCD CONSTANT
202: 0 1 1   0           ORR
203: 4 0 0  68           CALL    DIGIT
204: 5 0 0 200           JMP     .2
205: 4 0 3 255/          CALL    PCHCNS            PUNCH THE CONSTANT INTO NEXT DATA WORD
206: 0 0 1   0    .1     LOD               0       EXIT TRUE, CASE 0:
207: 7 2 2   0           XT    2                     STACK CONTAINS 0 AND ADDRESS OF PRIMARY

208: 1 0 2 129    POWTEN MSEE    CHAR1             LOOK FOR POWER OF TEN
209: 0 0 1   0           LOD               0
210: 1 0 1 128    .1     NSEE    CHAR0
211: 7 1 2   0           XT    1                   EXIT TRUE, WITH SCALE FACTOR ON STACK
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212: 0 0 2   1            ADD          1
213: 5 0 0 210            JMP      .1

214: 4 1 0 192    TERM    NCALL    PRIMRY          TERM: GIVES 2 OUTPUTS IF A TERM IS FOUND
215: 7 0 3   0            XF                       EXIT FALSE IF NO PRIMARY SEEN
216: 1 0 1 173            NSEE     CHAR*
217: 5 0 3 255/           JMP      .6
218: 0 0 1 229            LOD      =MUL            MULTIPLICATION OPERATOR
219: 4 2 0 192    .2      MCALL    PRIMRY          SCAN SECOND OPERAND
220: 1 0 1 173            NSEE     CHAR*
221: 1 0 0 144            SEE      CHAR/
222: 4 1 0 208            NCALL    POWTEN          SCAN PWR OF TEN IF 2ND OPERAND FOLWD BY * OR /
223: 0 0 1   0            LOD                  0  OTHERWISE SET SCALE FACTOR ZERO
224: 7 1 1 164            CMP      1 =LSR
225: 4 0 0 172/           CALL     FREEA           STORE ACCUMULATOR IF FULL
226: 6 5 0   0            GET      5
227: 7 5 0   0            INX      5
228: 0 2 3 255/           XEC      .0              PUT FIRST OPERAND INTO ACCUMULATOR
229: 3 1 0   1            EQ       1           1
230: 4 0 0 205/           CALL     PCHCNS          PUT 2ND OPERAND INTO MEMORY IF A SMALL CONSTANT
231: 7 2 0   0            INX      2
232: 7 4 1   0            CMP      4               MULTIPLY OR DIVIDE BY SECOND OPERAND
233: 0 0 1 255            LOD                  255 (255 IS ADDRESS OF "TEMP" IN OBJECT PROGRAM)
234: 0 0 1   2            LOD                  2   EXIT TRUE, CASE 2: TERM IS IN ACCUMULATOR
235: 7 2 2   0            XT       2                   STACK CONTAINS 2 AND ADDRESS OF "TEMP"
236: 7 1 1 221    .0      CMP      1 =TRA
237: 7 1 1 165            CMP      1 =INK
238: 1 0 1 144    .6      NSEE     CHAR/           EXIT TRUE: TERM IS JUST A PRIMARY
239: 7 2 2   0            XT       2
240: 0 0 1 237            LOD      =DIV            DIVISION OPERATOR
241: 5 0 0 219            JMP      .2

242: 0 0 1   0    NUMEX1  LOD                  0   MARK ACCUMULATOR EMPTY
243: 6 1 1 105            ST       1 ASTATE
244: 4 1 0 214    NUMEXP  NCALL    TERM            LOOK FOR NUMERIC EXPRESSION
245: 7 0 3   0            XF                       EXIT FALSE IF THERE IS NONE HERE
246: 7 0 0   0            INX                      OTHERWISE, COMPILE CODE TO PUT THE VALUE OF
247: 0 2 3 255/           XEC      .0              THE NUMERIC EXPRESSION INTO THE ACCUMULATOR
248: 0 0 1   1    .1      LOD                  1
249: 6 1 1 105            ST       1 ASTATE        MARK ACCUMULATOR FULL
250: 1 0 0 155    .2      SEE      CHAR+
251: 5 0 3 255/           JMP      .3
252: 1 0 0 151            SEE      CHAR-
253: 5 0 3 255/           JMP      .4
254: 4 0 3 255/           CALL     LOADA           LOAD ACCUMULATOR IF STORED
255: 7 0 2   0            XT                       EXIT TRUE, LEAVING NOTHING EXTRA ON STACK
256: 4 0 3 255/   .3      CALL     ADDTRM          ADD ANOTHER TERM TO ACCUMULATOR
257: 5 0 0 250            JMP      .2
258: 4 0 3 255/   .4      CALL     SUBTRM          SU BTRACT ANOTHER TERM FROM ACCUMULATOR
259: 5 0 0 250            JMP      .2
260: 7 1 1 221    .0      CMP      1 =TRA
261: 7 1 1 165            CMP      1 =INK
262: 5 1 0 248            JMP      1 .1
263: 4 2 0 214    ADDTRM  MCALL    TERM            SCAN TERM
264: 3 0 1   2            NEQ                  2   IF NOT A PRODUCT OR QUOTIENT,
265: 4 0 0 254/           CALL     LOADA               ENSURE ACCUMULATOR IS FULL
266: 7 0 0   0            INX
267: 0 2 3 255/           XEC      .1              ADD THE TERM  (NOTE THREE CASES)
268: 0 0 1   1            LOD                  1
269: 6 1 1 105            ST       1 ASTATE        MARK ACCUMULATOR FULL
270: 7 0 2   0            XT
271: 7 1 1 225    .1      CMP      1 =ADA          CASE 0, ADD DATA TO ACCUMULATOR
272: 7 1 1 208            CMP      1 =ADK          CASE 1, ADD SMALL CONSTANT
273: 7 1 1 225            CMP      1 =ADA          CASE 2, ADD "TEMP" TO ACCUMULATOR
274: 4 2 0 214    SUBTRM  MCALL    TERM            SCAN TERM
275: 3 0 1   2            NEQ                  2   IF NOT A PRODUCT OR QUOTIENT,
276: 4 0 1   9/           CALL     LOADA               ENSURE ACCUMULATOR IS FULL
277: 7 0 0   0            INX
278: 0 2 3 255/           XEC      .1              SUBTRACT (NOTE THREE CASES)
279: 7 0 2   0            XT
280: 7 1 1 227    .1      CMP      1 =SUA          CASE 0, SUBTRACT DATA FROM ACCUMULATOR
281: 7 1 1 210            CMP      1 =SUK          CASE 1, SUBTRACT SMALL CONSTANT FROM ACCUM
282: 7 1 1 235            CMP      1 =SUM          CASE 2, SUBTRACT ACCUMULATOR FROM "TEMP"

283: 6 0 0 105    FREEA   GET      ASTATE
284: 3 1 1   1            NEQ      1           1
285: 7 0 2   0            XT
286: 0 0 1 255            LOD                  255 IF ACCUMULATOR FULL, STORE IT IN "TEMP"
287: 7 1 1 217            CMP      1 =TRM
288: 0 0 1   2            LOD                  2
289: 6 1 1 105    FREEA1  ST       1 ASTATE
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290: 7 0 2   0            XT

291: 6 0 0 105   LOADA   GET      ASTATE
292: 3 1 1   2           NEQ   1          2
293: 7 0 2   0           XT
294: 0 0 1 255           LOD               255      IF ACCUMULATOR WAS STORED IN "TEMP",
295: 7 1 1 221           CMP   1 =TRA               FILL IT AGAIN
296: 0 0 1   1           LOD               1
297: 5 0 1  33           JMP      FREEA1

298: 0 0 1 255   FINDXX  LOD               255      FIND INDEX REGISTER FOR TEMPORARY QUANTITY
299: 6 1 1 180           ST    1 TLOC
300: 0 0 1 253   FINDX   LOD               253      SEARCH FOR AN INDEX REGISTER, WHERE THE
301: 3 0 0  13   .2      EQ                13         QUANTITY SPECIFIED BY TLOC IS TO BE PUT
302: 5 0 3 255/          JMP      .4
303: 0 0 2   4           ADD               4
304: 7 1 0   0   .1      INX   1
305: 6 0 0   1           GET      XCONT             FIRST SEE IF TLOC ALREADY IS IN SOME
306: 7 0 0 180           INX      TLOC                 INDEX REGISTER
307: 3 0 1   0           NEQ               0
308: 5 1 1  45           JMP   1  .2
309: 6 0 0 180           GET      TLOC
310: 0 1 1   0           ORR                        AND IF TLOC IS NOT INDEXED ITSELF
311: 0 4 2   4           SRC               4
312: 3 1 1   0           NEQ   1           0
313: 5 0 1  45           JMP      .2
314: 7 1 0   0           INX   1
315: 6 0 2   0           INC      XREQ              IF SO, INCREASE NUMBER OF REQUESTS
316: 7 1 2   0           XT    1                    EXIT TRUE WITH 1,5,9,OR13 INDICATING THE INDEX
317: 0 0 3   4   .3      SUB               4
318: 7 1 0   0   .4      INX   1                    IF FIRST SEARCH FAILS, SEE IF THERE IS ANY
319: 6 0 0   1           GET      XCONT             INDEX REGISTER WITH UNDEFINED CONTENTS
320: 6 1 0   0           GET   1
321: 0 4 2   4           SRC               4
322: 0 1 1   0           ORR
323: 3 1 0   0           EQ    1           0
324: 5 0 3 255/          JMP      .6
325: 3 0 1   1           NEQ               1
326: 5 0 1  61           JMP      .3
327: 7 1 0   0   .5      INX   1                    AND IF THE SECOND SEARCH ALSO FAILS, FIND
328: 6 0 0   0           GET      XREQ              AN INDEX REGISTER WHICH IS NOT NOW TIED TO
329: 3 1 0   0           EQ    1           0        ANY REQUESTS
330: 5 0 1  68/          JMP      .6
331: 0 0 2   4           ADD               4        IF THIS FAILS, THE INPUT WAS TOO COMPLICATED
332: 3 0 3  17           MNEQ              17       TO HANDLE WITH ONLY FOUR INDEX REGISTERS
333: 5 0 1  71           JMP      .5
334: 6 0 0 180   .6      GET      TLOC
335: 7 2 0   0           INX   2
336: 6 1 1   1           ST    1  XCONT             SET INDEX CONTENTS
337: 0 0 1   1           LOD               1
338: 7 2 0   0           INX   2
339: 6 1 1   0           ST    1  XREQ             SET NUMBER OF REQUESTS EQUAL TO 1
340: 7 1 3   0           XF    1
341: 0 0 1   0   CLEARX  LOD               0
342: 6 0 1   2           ST       XCONT1           CLEARX SUBROUTINE: SETS ALL INDEX
343: 6 0 1   6           ST                6        REGISTER CONTENTS TO UNDEFINED
344: 6 0 1  10           ST                10
345: 6 1 1  14           ST    1           14
346: 7 0 2   0           XT

347: 0 0 1   1   ALPHVR  LOD               1        ALPHA VARIABLE
348: 1 0 0 102           SEE      ID2
349: 5 0 3 255/          JMP      .1
350: 1 1 1 103           NSEE  1  ID3               MUST BE IDENTIFIER TYPE 2 OR 3
351: 7 0 3   0           XF                         (NOT A PARAMETER)
352: 6 0 0 170           GET      TSIZ              IF ALPHA VARIABLE FOUND, EXIT WITH
353: 6 2 3   0   .1      XCH   2                    STACK CONTAINING  BOTH ADDRESS AND SIZE
354: 5 0 0 164           JMP      NVAR1

355: 4 0 1  91   ALPHEX  CALL     ALPHVR            ALPHA EXPRESSION
356: 7 2 2   0           XT    2                    EXIT WITH STACK CONTAINING ADDRESS AND SIZE
357: 1 0 0 105           SEE      ID5               IT CAN BE A PARAMETER
358: 5 0 3 255/          JMP      .1
359: 1 0 1 154           NSEE     CHAR"             OR AN ALPHAMERIC CONSTANT
360: 7 0 3   0           XF
361: 0 0 1   0           LOD               0
362: 6 0 1 155           ST       TEMP1
363: 0 0 1   0   .2      LOD               0        BEGIN NEW WORD OF ALPHA CONSTANT
364: 0 0 1   2   .3      LOD               2
365: 6 1 1 150           ST    1  MODE             SET SCAN MODE TO ACCEPT BLANKS
366: 1 0 1 200           NSEE     INVALD            GET NEXT CHARACTER
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367: 6 0 0 160          GET     CHAR
368: 7 1 0   0          INX     1
369: 1 0 0   0          SEE             0
370: 3 0 0 154          EQ      CHAR"
371: 5 1 3 255/         JMP     1 .5                    IS IT A CLOSE QUOTE?
372: 0 1 1   0          ORR
373: 0 4 2   2    .6    SRC             2
374: 3 0 0   0          EQ              0               HAS A WORD BEEN FILLED?
375: 5 0 1 108          JMP     .3
376: 5 0 1 107          JMP     .2
377: 6 2 0   0    .4    GET     2                       IS THE QUOTE THE FIRST CHARCTER OF THE STRING?
378: 3 1 1   0          NEQ     1               0
379: 5 0 3 255/         JMP     .8
380: 0 0 2 154          ADD     CHAR"
381: 5 0 1 117          JMP     .6
382: 0 1 2   2    .5    SLC             2
383: 3 0 0   0          EQ              0               IS CONSTANTS LENGTH A MULTIPLE OF 8?
384: 5 0 1 121          JMP     .4
385: 0 4 2   2    .7    SRC             2               RIGHT-NORMALIZE THE LAST WORD OF THE CONSTANT
386: 3 0 0   0          EQ              0
387: 5 0 1 129          JMP     .7
388: 4 0 0 230/   .8    CALL    PCHCNS                  PUNCH EACH WORD
389: 6 0 2 155          INC     TEMP1
390: 6 1 1 125          ST      1 HOLD
391: 3 0 1   0          NEQ             0
392: 5 0 1 132          JMP     .8
393: 5 1 3 255/         JMP     1 .9
394: 6 0 0 155    .9    GET     TEMP1                   SIZE OF CONSTANT
395: 6 0 0 125          GET     HOLD                    LOCATION OF FIRST WORD
396: 7 2 2   0          XT      2
397: 0 0 1 255    .1    LOD             255             TREAT PARAMETER AS SIZE 255
398: 6 2 3   0          XCH     2
399: 5 0 0 157          JMP     NVAR4                   LOOK FOR POSSIBLE INDEX

400: 0 0 1 217    SET   LOD     =TRM                    "SET" STATEMENT
401: 4 0 0 153          CALL    NUMVAR
402: 5 0 3 255/         JMP     .2                      NUMERIC SET
403: 4 2 1  91          MCALL   ALPHVR
404: 1 0 2 147          MSEE    CHAR=                   ALPHABETIC SET
405: 4 2 1  99          MCALL   ALPHEX
406: 6 2 0   0          GET     2                       GET SIZE OF RIGHTHAND SIDE
407: 7 5 0   0          INX     5                       GET SIZE OF LEFTHAND SIDE
408: 2 0 0   0          GE              0
409: 6 5 3   0    .4    XCH     5                       GET MINIMUM SIZE, S
410: 0 0 3   1    .1    SUB             1
411: 6 0 1 115          ST      TEMP                    COMPILE S-1 TRA, TRM PAIRS
412: 3 1 0   0          EQ      1
413: 5 0 3 255/         JMP     .3
414: 0 4 0 221          SCMP    =TRA
415: 6 1 2   0          INC     1
416: 6 3 0   0          GET     3
417: 6 7 0   0          GET     7                       (HERE STACK=ADDR1,ADDR2,SIZ2,ADDR1,SIZ1,OP,PROT
418: 3 1 0   1          EQ      1               1
419: 0 4 0  71          SCMP    =PROT
420: 0 4 0 217          SCMP    =TRM
421: 5 1 3 255/         JMP     1 .5
422: 6 3 2   0    .5    INC     3
423: 6 0 0 115          GET     TEMP
424: 5 0 1 154          JMP     .1
425: 7 2 1 221    .3    CMP     2 =TRA
426: 6 2 3   0          XCH     2
427: 5 1 3 255/         JMP     1 SET2
428: 1 0 2 147    .2    MSEE    CHAR=
429: 4 2 0 244          MCALL   NUMEXP
430: 6 3 0   0    SET2  GET     3
431: 3 1 0   1          EQ      1               1       CHECK IF PROTECTION DESIRED
432: 0 4 0  71          SCMP    =PROT
433: 7 2 0   0          INX     2
434: 7 3 1   0          CMP     3                       COMPILE TRM, ADM, OR SUM
435: 5 0 0   3          JMP     EOS
436: 4 2 0 244    ADD   MCALL   NUMEXP                  ADD STATEMENT.  PUT EXPRESSION INTO ACCUMULATOR
437: 1 0 2  57          MSEE    "TO
438: 0 0 1 233          LOD     =ADM
439: 4 2 0 153    ADDSUB MCALL  NUMVAR
440: 5 0 1 174          JMP     SET2
441: 4 2 0 244    SUBTRA MCALL  NUMEXP                  SU BTRACT STATEMENT
442: 1 0 2  50          MSEE    "FROM
443: 0 0 1 235          LOD     =SUM
444: 5 0 1 183          JMP     ADDSUB

445: 1 0 1 174    CONDIT NSEE   CHAR(                  CONDITION
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446: 5 0 3 255/          JMP     .1
447: 4 2 1 189           MCALL   CONDIT
448: 1 0 2 142           MSEE    CHAR)
449: 7 2 2   0           XT      2
450: 4 1 0 244    .1     NCALL   NUMEXP          AT EXIT,STACK CONTAINS SK INSTRUCTION AND
                                                   ALSO THE GP3 "PARAMETER" PART FOR CONDITION
451: 5 0 3 255/          JMP     .0
452: 1 0 1 147           NSEE    CHAR=
453: 5 0 3 255/          JMP     .2
454: 4 0 1  18    .3     CALL    SUBTRM          SUBTRACT RIGHTHAND SIDE TERM
455: 1 0 0 155    .4     SEE     CHAR+
456: 5 0 1 198           JMP     .3
457: 1 0 1 151           NSEE    CHAR-
458: 5 0 3 255/          JMP     .5
459: 4 0 1   7           CALL    ADDTRM          ADD RIGHTHAND SIDE TERM
460: 5 0 1 199           JMP     .4              (NOTE THAT + AND - ARE REVERSED HERE)
461: 4 0 1  35    .5     CALL    LOADA           ENSURE ACCUMULATOR IS FULL
462: 0 0 1  17           LOD             17
463: 0 0 1   1           LOD     =SKL            SKIP ACCUMULATOR ZERO
464: 7 2 2   0           XT      2
465: 0 0 1   8    .2     LOD     =SKA
466: 1 0 0  53           SEE     "NEGAT          SET THE "-" FLAG
467: 5 0 3 255/          JMP     .6
468: 1 0 2   7           MSEE    "CODE           OR THE CODE(K) FLAG
469: 5 0 3 255/          JMP     .7              FOR AN SKA INSTRUCTION
470: 1 0 1  12    .0     NSEE    "KEY            LOOK FOR KEY(K) CONDITION
471: 5 0 3 255/          JMP     .8
472: 0 0 1  10           LOD     =SKK
473: 1 0 2 174    .7     MSEE    CHAR(
474: 4 2 0  77           MCALL   CONST
475: 2 0 3   5           MNGE            5
476: 1 0 2 142           MSEE    CHAR)
477: 7 0 0   0           INX
478: 0 2 3 255/   .6     XEC     .10
479: 6 2 3   0           XCH     2
480: 7 2 2   0           XT      2
481: 0 0 1  17    .8     LOD             B00010001 LOOK FOR PAGE OVERFLOW
482: 1 0 0  15           SEE     "PAGE           OR OVERFLOW CONDITION
483: 0 0 2   7           ADD             7
484: 1 0 2  54           MSEE    "OVRFL          IF NOT, WE HAVE AN IMPROPER CONDITION
485: 0 0 1   2           LOD     =SKT
486: 7 2 2   0           XT      2
487: 0 0 1  17    .10    LOD             B00010001 KEY(0) PARAMETER PART
488: 0 0 1  18           LOD             B00010010 KEY(1)
489: 0 0 1  20           LOD             B00010100 KEY(2)
490: 0 0 1  24           LOD             B00011000 KEY(3)
491: 0 0 1  17           LOD             B00010001 KEY(4)

492: 0 0 2   8    UNLESS ADD             8       UNLESS REVERSE IF CONDITION
493: 4 2 1 189    IF     MCALL   CONDIT
494: 1 0 1 148           NSEE    CHAR,
495: 5 0 3 255/          JMP     .0              COMMA IS OPTIONAL
496: 1 0 0  10    .0     SEE     "GO             LOOK AHEAD TO SEE IF CONDITION IS FOLLOWED
497: 5 0 3 255/          JMP     .1              BY A SIMPLE GO STATEMENT
498: 4 0 3 255/          CALL    IFSUB           IF NOT, COMPILE CODE TO SKIP AROUND
499: 5 0 0  14           JMP     STATE              THE STATEMENT
500: 1 0 2  57    .1     MSEE    "TO
501: 1 0 0 106           SEE     ID6
502: 5 0 3 255/          JMP     .2
503: 4 0 1 242/          CALL    IFSUB
504: 5 0 3 255/          JMP     GO2
505: 6 3 0   0    .2     GET     3               SIMPLE GO STATEMENT, REVERSE THE CONDITION
506: 2 1 1   8           NGE     1       8
507: 0 0 2   4           ADD     =EX-SK
508: 7 0 0   0           INX
509: 7 2 1   0           CMP     2       0
510: 5 0 3 255/          JMP     GO1
511: 6 1 1 115    IFSUB  ST      1 TEMP
512: 6 3 0   0           GET     3
513: 2 1 0   8           GE      1       8
514: 0 0 2   4           ADD     =EX-SK          CHANGE SK TO EX
515: 7 0 0   0           INX
516: 7 2 1   0           CMP     2       0
517: 6 0 0 110           GET     LOCP
518: 0 0 1   2           LOD             2
519: 7 0 1   0           CMP     =STOP           (THIS SYLLABLE WILL BE FIXED UP LATER)
520: 6 0 0 115           GET     TEMP
521: 7 0 2   0           XT

522: 1 0 2  57    GO     MSEE    "TO
523: 1 0 1 141    GO2    NSEE    CHAR#
524: 5 0 3 255/          JMP     .1
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525: 0 0 1   1            LOD       1
526: 1 0 0 141            SEE       CHAR#          GO TO #
527: 0 0 2 254            ADD       254               OR GO TO ##
528: 7 1 1  72            CMP    1 =RETRN
529: 5 0 0   3            JMP       EOS
530: 1 0 0 106     .1     SEE       ID6            LOOK FOR LABEL
531: 4 1 0 164     GO1    NCALL     NVAR1           OR PARAMETER
532: 4 2 0 155            MCALL     NVAR2
533: 7 1 1  33            CMP    1 =BRU1
534: 5 0 0   3            JMP       EOS

535: 4 0 1  85     FIXUP  CALL      CLEARX         TOP OF STACK BEFORE CALLING FIXUP IS THE
536: 6 2 3   0            XCH    2                  SYLLABLE ADDRES TO BE FIXED:SSOOWWWW
537: 0 4 2   2            SRC       2
538: 0 0 2  96            ADD       B01100000
539: 7 1 0   0            INX    1
540: 0 1 3   0            PCH       0              PUNCH  0110SS00
541: 0 4 1   6            XOR       B0110          ADJUST PARITY SO 0110 NOT COUNTED
542: 0 1 2   2            SLC       2
543: 7 0 0   0            INX
544: 0 1 3   0            PCH       0              PUNCH WWWWWWWW
545: 6 0 0 110            GET       LOCP
546: 7 1 0   0            INX    1
547: 0 1 3   0            PCH       0              PUNCH A BRU INSTRUCTION
548: 0 4 2   2            SRC       2
549: 7 0 0   0            INX
550: 0 1 3  32            PCH       =BRU0
551: 7 0 0 100     ENDMSG INX       PARITY         PUNCH END OF MESSAGE CODE
552: 0 1 3  80            PCH       B01010000
553: 0 0 1   0            LOD       0
554: 6 1 1 100            ST     1  PARITY         AND SET PARITY TO ZERO AGAIN
555: 7 0 2   0            XT

556: 6 2 3   0     PCHCN1 XCH    2                 PUNCH A FULL WORD CONSTANT
557: 5 0 3 255/           JMP       PCHCN2         PCHCN1 ASSUMES STACK CONTAINS LOC, CONST
558: 6 0 0 130     PCHCNS GET       LOCV           PCHCNS ASSUMES STACK CONTAINS ONLY CONST, AND
559: 0 0 3   1            SUB       1                 LOC TO USE IS LOCV
560: 6 0 1 130            ST        LOCV
561: 0 0 2   1            ADD       1
562: 0 1 3 161     PCHCN2 PCH       B10100001      STACK NOW = WWWWWWWW, SU B RETRN, CONST
563: 0 4 1  10            XOR       B1010          PUNCH 10100001 AND ADJUST PARITY
564: 7 1 0   0            INX    1
565: 0 1 3   0            PCH       0
566: 6 3 3   0            XCH    3
567: 6 1 1 115            ST     1  TEMP
568: 0 0 1   0            LOD       0
569: 6 0 0 115     .1     GET       TEMP           PUNCH ALL EIGHT CHARACTERS
570: 7 1 0   0            INX    1
571: 0 1 3   0            PCH       0
572: 0 4 2   2            SRC       2
573: 6 1 1 115            ST     1  TEMP
574: 0 0 2   1            ADD       1
575: 3 0 1   8            NEQ       8
576: 5 0 2  57            JMP       .1
577: 5 1 2  39            JMP    1  ENDMSG

578: 4 1 0 192     ARGMNT NCALL     PRIMRY         PROCESS THE ARGUMENT TO A CALL OR CODE
579: 5 0 3 255/           JMP       .1                STATEMENT
580: 3 1 0   1            EQ     1  1
581: 4 0 2  46            CALL      PCHCNS
582: 5 0 3 255/           JMP       .3
583: 4 1 1  99     .1     NCALL     ALPHEX
584: 5 0 3 255/           JMP       .2
585: 6 2 3   0            XCH    2
586: 5 1 2  70/           JMP    1  .3
587: 1 0 2 106     .2     MSEE      ID6
588: 6 0 0 180            GET       TLOC
589: 7 1 2   0     .3     XT     1                 EXIT WITH ADDRESS ON STACK

590: 1 0 2 104     CALL   MSEE      ID4            SCAN SUBROUTINE NAME IN CALL STATEMENT
591: 6 0 0 180            GET       TLOC
592: 6 0 1 135            ST        ARG
593: 1 0 1 174            NSEE      CHAR(
594: 5 0 3 255/           JMP       .8
595: 4 0 2  66     .1     CALL      ARGMNT         SCAN ARGUMENT
596: 4 0 1  42            CALL      FINDXX         FIND AN AVAILABLE INDEX REGISTER
597: 5 0 3 255/           JMP       .4
598: 0 0 1   0     .4     LOD       0
599: 7 2 0   0            INX    2
600: 6 1 1   0            ST     1  XREG
601: 6 2 0   0            GET    2
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602: 7 2 0   0          INX   2
603: 7 1 1  17          CMP   1 =LIR
604: 6 0 0 135          GET     ARG
605: 0 0 3   1          SUB             1
606: 6 0 1 135          ST      ARG             PUT ADDRESS OF ARGUMENT INTO
607: 7 1 1  67          CMP   1 =LKBR             PARAMETER LOCATION
608: 7 2 1  69          CMP   2 =SIB
609: 1 0 0 148          SEE     CHAR,
610: 5 0 2  83          JMP     .1
611: 1 0 2 142          MSEE    CHAR)
612: 7 1 1 129  .8      CMP   1 =SRJ            SUBROUTINE JUMP
613: 5 0 0   3          JMP     EOS

614: 0 0 1   3  PSK     LOD             3       SCAN A PSK CODE, A0 TO B7
615: 6 0 1 150          ST      MODE
616: 1 0 0 177          SEE     CHARA
617: 5 0 3 255/         JMP     .1
618: 1 1 2 178          MSEE  1 CHARB
619: 0 0 1  11          LOD            11
620: 0 0 3   3  .1      SUB             3
621: 4 2 0  68          MCALL   DIGIT
622: 0 1 1   0          ORR
623: 7 1 2   0          XT    1                 EXIT WITH EQUIVALENT, 0 TO 15

624: 6 0 0 110  KEY     GET     LOCP            KEY ROUTINE STATEMENT
625: 7 1 0   0          INX   1
626: 0 0 1   5          LOD             5       BRANCH AROUND THE TABLE
627: 7 1 1  32          CMP   1 =BRU0
628: 0 4 2   1          SRC             1
629: 2 0 0 192  .2      GE              B11000000
630: 5 1 3 255/         JMP   1 .1              MAKE SURE TA BLE STARTS IN SYLLABLE 0
631: 0 0 2  64          ADD             B01000000
632: 7 0 1   0          CMP     =STOP
633: 5 0 2 117          JMP     .2
634: 6 0 0 110  .1      GET     LOCP
635: 1 0 2  55          MSEE    "ROUTN
636: 0 0 1   0          LOD             0
637: 4 2 2 102  .5      MCALL   PSK
638: 1 0 2 158          MSEE    CHAR:           COMPILE 16  BRU S AND/OR NOP S
639: 7 2 0   0  .3      INX   2
640: 3 0 0   0          EQ              0
641: 5 0 3 255/         JMP     .4
642: 7 0 1 211          CMP     =NOP
643: 5 0 3 255/         JMP     .6
644: 1 0 2 106  .4      MSEE    ID6
645: 6 0 0 180          GET     TLOC
646: 7 1 1  33          CMP   1 =BRU1
647: 6 2 2   0  .6      INC   2
648: 6 2 0   0          GET   2
649: 3 1 0  16          EQ    1         16
650: 5 0 3 255/         JMP     .9
651: 7 2 0   0          INX   2
652: 3 0 1 255          NEQ             255
653: 5 0 2 127          JMP     .3
654: 1 0 0 148          SEE     CHAR,
655: 5 1 2 125          JMP   1 .5
656: 0 0 2 200          ADD             200
657: 5 0 2 127          JMP     .3
658: 2 2 2  15  .9      MGE   2         15      CHECK THAT PSK S WERE IN ORDER
659: 7 1 1 196          CMP   1 =LPKR
660: 5 0 0   3          JMP     EOS

661: 1 0 1 150  PSKLST  NSEE    CHAR;           PROCESS PSK LIST FOR ENTER AND TYPE STATEMENTS
662: 7 0 2   0          XT
663: 0 0 1   0          LOD             0
664: 6 0 1 115          ST      TEMP
665: 0 0 1   1          LOD             1
666: 6 1 1 125          ST    1 HOLD
667: 4 2 2 102  .5      MCALL   PSK
668: 7 2 0   0  .3      INX   2
669: 3 0 1   0          NEQ             0
670: 5 0 3 255/         JMP     .4
671: 6 0 0 115          GET     TEMP            FOR EACH PSK LISTED, ADD THE APPROPRIATE
672: 7 0 0 125          INX     HOLD                POWER OF TWO
673: 0 0 2   0          ADD             0
674: 6 1 1 115          ST    1 TEMP
675: 6 2 2   0  .4      INC   2
676: 6 0 0 125          GET     HOLD
677: 7 1 0   0          INX   1
678: 0 0 2   0          ADD             0       DOU BLE THE VALUE OF HOLD
679: 3 0 0   0          EQ              0       IS THE RESULT 256?
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680: 5 1 3 255/          JMP    1 .7
681: 6 1 1 125    .6     ST     1 HOLD
682: 7 2 0   0           INX    2
683: 3 0 1 255           NEQ           255
684: 5 0 2 156           JMP      .3
685: 1 0 0 148           SEE      CHAR,
686: 5 1 2 155           JMP    1 .5
687: 0 0 2 200           ADD           200
688: 5 0 2 156           JMP      .3
689: 6 2 0   0    .7     GET    2
690: 3 0 1   8           NEQ           8
691: 5 0 3 255/          JMP      .9
692: 6 0 0 115           GET      TEMP
693: 3 0 1   0           NEQ           0
694: 7 0 1 195           CMP      =PKA          COMPILE PKA IF ANY A KEY WERE LISTED
695: 0 0 1   0           LOD           0
696: 6 3 1 115           ST     3 TEMP
697: 0 0 1   1           LOD           1
698: 5 0 2 169           JMP      .6
699: 6 0 0 115    .9     GET      TEMP
700: 3 0 1   0           NEQ           0
701: 7 0 1 199           CMP      =PKB          COMPILE PK B IF ANY B KEYS WERE LISTED
702: 5 2 3 255/          JMP    2 .10
703: 2 2 2  15    .10    MGE    2      15     CHECK THAT PSK S WERE IN ORDER
704: 7 0 2   0           XT

705: 1 0 2 174    ENTER  MSEE     CHAR(
706: 4 2 0  77           MCALL    CONST        GET SIZES FOR ENTER STATEMENT
707: 0 1 2   1           SLC            1
708: 1 0 1 148           NSEE     CHAR,
709: 5 0 3 255/          JMP      .1
710: 4 2 0  77           MCALL    CONST
711: 0 1 1   0           ORR
712: 1 0 2 142    .1     MSEE     CHAR)
713: 4 2 0 153           MCALL    NUMVAR
714: 4 0 2 149           CALL     PSKLST       PROCESS PKA OR PKB IF CALLED FOR
715: 7 1 1  67           CMP    1 =LKBR        LKBR WITH VARIABLE
716: 7 1 1 151           CMP    1 =NERCM       NERCM WITH SIZES
717: 5 0 0   3           JMP      EOS
718: 1 0 2 174    TYPE   MSEE     CHAR(
719: 4 2 0  77           MCALL    CONST        GET SIZE FOR TYPE STATEMENT
720: 1 0 2 142           MSEE     CHAR)
721: 4 0 1  91           CALL     ALPHVR
722: 5 0 3 255/          JMP      .1
723: 0 0 1   0           LOD            0      PARAMETER IS ALLOWED ON TYPE STATEMENT
724: 4 1 0 155           NCALL    NVAR2
725: 5 1 3 255/          JMP    1 .2
726: 4 0 2 149    .1     CALL     PSKLST
727: 7 2 1 163           CMP    2 =LTKMR       LTKMR WITH VARIABLE
728: 7 1 1 152           CMP    1 =TKM         TKM WITH SIZE
729: 5 0 0   3           JMP      EOS
730: 4 0 2 149    .2     CALL     PSKLST       NO VARIABLE:
731: 7 1 1 153           CMP    1 =TK          TK SIZE
732: 5 0 0   3           JMP      EOS

733: 1 0 1  55    BEGIN  NSEE     "ROUTN       BEGIN
734: 5 0 3 255/          JMP      BLOOP
735: 6 0 0 110           GET      LOCP         BEGIN ROUTINE
736: 0 0 1   1           LOD            1      JUMP AROUND THE SU BROUTINE
737: 7 0 1   0           CMP      =STOP        (THIS INSTRUCTION WILL BE FIXED UP LATER)
738: 0 0 1   4           LOD            4
739: 6 1 1 120           ST     1 TYP
740: 0 0 1  32           LOD      =BRU0
741: 0 1 2   2           SLC            2
742: 6 0 0 110           GET      LOCP
743: 0 1 1   0           ORR
744: 4 0 2  46           CALL     PCHCNS       PUT BRU INSTRUCTION INTO DATA AREA FOR
745: 6 0 2 130           INC      LOCV              SU BROUTINE NAME
746: 1 0 2 104           MSEE     ID4          SEE SU BROUTINE NAME
747: 1 0 1 174           NSEE     CHAR(
748: 5 1 0 122           JMP    1 EOD          SCAN PARAMETERS
749: 0 0 1   5           LOD            5
750: 6 1 1 120           ST     1 TYP
751: 1 0 2 105    .1     MSEE     ID5
752: 0 0 3   1           SUB            1      CHECK THAT THEY ARE NEW IDENTIFIERS
753: 7 0 0 180           INX      TLOC
754: 3 0 2   0           MEQ            0
755: 1 0 0 148           SEE      CHAR,
756: 5 0 2 239           JMP      .1
757: 1 0 2 142           MSEE     CHAR)
758: 5 1 0 122           JMP    1 EOD
```

```
759:  1 0 1   55    END     NSEE      "ROUTN
760:  5 0 3 255/              JMP       ELOOP
761:  0 0 1    0              LOD                0          END ROUTINE
762:  7 1 1  139              CMP     1 =SRR                SOMPILE SU BROUTINE RETURN
763:  3 1 2    1              MEQ     1          1          WE MUST NOW HAVE LOCATION OF JUMP FROM THE
764:  4 0 2   23    END1      CALL      FIXUP                 CORRESPONDING BEGIN STATEMENT ON THE STACK
765:  0 0 1    1    COMENT    LOD                1
766:  6 1 1  150              ST      1 MODE                SET SCAN MODE TO GO TO NEXT "."
767:  5 0 0  122              JMP       EOD

768:  1 0 2   56    BLOOP     MSEE      "LOOP               BEGIN LOOP
769:  1 0 2  101              MSEE      ID1
770:  6 0 0  180              GET       TLOC
771:  1 0 2   50              MSEE      "FROM
772:  4 2 0  244              MCALL     NUMEXP                    TRA  EXP1
773:  7 0 1  217              CMP       =TRM                      TRM  VAR
774:  4 0 1   85              CALL      CLEARX              MARK INDEX REGISTER CONTENTS UNDEFINED
775:  6 0 0  110              GET       LOCP
776:  6 1 1  145              ST      1 SPEC
777:  7 0 1    0              CMP       =STOP                     BRU  .3    (WILL BE FIXED UP)
778:  6 0 0  110              GET       LOCP
779:  6 2 3    0              XCH     2
780:  1 0 1   58              NSEE      "BY
781:  5 0 3 255/              JMP       .1
782:  4 2 0  242              MCALL     NUMEX1               .2   TRA  EXP2
783:  5 0 3 255/              JMP       .2
784:  0 0 1    1    .1        LOD                1
785:  7 1 1  165              CMP     1 =INK
786:  7 0 1  233    .2        CMP       =ADM                      ADM  VAR
787:  1 0 2   57              MSEE      "TO
788:  6 0 0  145              GET       SPEC
789:  4 0 2   23              CALL      FIXUP
790:  4 2 0  242              MCALL     NUMEX1               .3   TRA  EXP3
791:  7 1 1  227              CMP     1 =SUA                    SUA  VAR
792:  0 0 1   17              LOD                B00010001
793:  7 1 1   12              CMP     1 =EXA                    EXA   -
794:  6 0 0  110              GET       LOCP
795:  0 0 1    3              LOD                3
796:  7 0 1    0              CMP       =STOP                   BRU  END OF LOOP (WILL  BE FIXED UP)
797:  5 0 0  122              JMP       EOD

798:  1 0 1   56    ELOOP     NSEE      "LOOP               END LOOP
799:  5 0 3 255/              JMP       EOP
800:  3 1 2    3              MEQ     1          3          MUST FIND THE FIXUPS FROM BEGIN LOOP
801:  6 2 3    0              XCH     2
802:  7 1 1   32              CMP     1 =BRUO                   BRU  .2
803:  5 0 2  252              JMP       END1

804:  4 0 0   77    POSITN    CALL      CONST               LOOK FOR POSITION PREFIX
805:  5 0 3 255/              JMP       .1                  IS IT A CONSTANT
806:  1 0 1  174              NSEE      CHAR(               OR IS THERE A LEFT PARENTHESIS
807:  7 0 3    0              XF                            IF NOT, EXIT FALSE
808:  4 2 0  244              MCALL     NUMEXP              OTHERWISE PUT EXPRESSION VALUE IN ACCUMULATOR
809:  1 0 2  142              MSEE      CHAR)
810:  4 0 1   42              CALL      FINDXX              FIND AN INDEX REGISTER
811:  5 0 3 255/              JMP       .3                  AND MARK THE ADDRESS AS ZERO, INDEXED
812:  7 0 1  167    .3        CMP       =TAIR
813:  0 1 2    4              SLC                4
814:  7 1 1  251    .1        CMP     1 =POS                LOAD POSITION REGISTER
815:  7 0 2    0              XT

816:  1 0 0  174    PRINT     SEE       CHAR(
817:  5 0 3 255/              JMP       .1
818:  4 2 1   99              MCALL     ALPHEX              PRINT ALPHA EXPRESSION
819:  1 0 0   51              SEE       "LEFT                  IS THE WORD "LEFT" PRESENT?
820:  5 0 3 255/              JMP       .2
821:  7 2 1  169              CMP     2 =PA
822:  5 0 0    3              JMP       EOS
823:  7 2 1   75    .2        CMP     2 =PAL
824:  5 0 0    3              JMP       EOS
825:  0 0 1    0    .1        LOD                0          SCAN A MASK
826:  6 0 1  115              ST        TEMP
827:  0 0 1    3              LOD                3
828:  6 1 1  150              ST      1 MODE
829:  1 0 0  138              SEE       CHAR$               FIRST LOK FOR $ AND/OR #
830:  0 0 2    8              ADD                8
831:  0 0 1    3              LOD                3
832:  6 1 1  150              ST      1 MODE
833:  1 0 0  141              SEE       CHAR#
834:  0 0 2    1              ADD                1
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835: 0 0 1   1          LOD             1
836: 0 1 2   1     .3   SLC             1          NOW SCAN THE MAIN  BODY OF THE MASK
837: 0 0 1   3          LOD             3          SET SCAN MODE TO SUPPRESS IDENTIFIER
838: 6 0 1 150          ST      MODE               BUILDING AND IDENTIFIER LOOKUP
839: 1 0 0 170          SEE     CHARZ
840: 5 0 3 255/         JMP     .10
841: 1 0 0 180          SEE     CHARD
842: 5 0 3 255/         JMP     .11
843: 1 0 0 149          SEE     CHAR.
844: 5 0 3 255/         JMP     .12
845: 1 0 0 130          SEE     CHAR2
846: 5 0 3 255/         JMP     .13
847: 1 0 0 185          SEE     CHARI
848: 5 1 3 255/         JMP   1 .23
849: 1 0 0 163          SEE     CHARS
850: 5 1 3 255/         JMP   1 .22
851: 1 1 0 178          SEE   1 CHARB
852: 5 0 3 255/         JMP     .25
853: 1 0 0 171     .14  SEE     CHAR¤              CENTS SIGN
854: 5 0 3 255/         JMP     .20
855: 1 0 0 168          SEE     CHARX
856: 5 0 3 255/         JMP     .24
857: 0 1 2   1          SLC             1          END OF MASK
858: 2 0 3  32          MNGE            B100000    MUST BE AT MOST 15 CHARACTERS
859: 2 0 0  16          GE              B10000
860: 0 0 3  16          SUB             B10000
861: 0 1 2   1     .50  SLC             1          SET UP LEADING ONES (E CODES)
862: 2 0 0  16          GE              B10000
863: 5 0 3 255/         JMP     .51
864: 0 0 2  16          ADD             B10000
865: 5 0 3  93          JMP     .50
866: 0 4 2   1     .51  SRC             1
867: 2 0 0  16          GE              B10000
868: 5 0 3  98          JMP     .51
869: 0 4 2   1          SRC             1
870: 0 1 1   0          ORR                        INSERT THE $/# CODE
871: 0 4 2   1          SRC             1
872: 6 0 0 115          GET     TEMP
873: 0 1 2   1          SLC             1
874: 6 0 0 190          GET     NMASKS             NOW SEARCH THROUGH MASK TA BLE FOR A
875: 3 0 0   0     .60  EQ              0            COMPATIBLE MASK
876: 5 1 3 255/         JMP   1 .62
877: 0 0 3   1          SUB             1
878: 0 3 3   0          MASK
879: 5 0 3 255/         JMP     .61                MASK IS IN TABLE
880: 5 0 3 107          JMP     .60
881: 6 2 2   0     .11  INC   2
882: 6 1 1 150     .10  ST    1 MODE
883: 1 0 0 148          SEE     CHAR,
884: 5 0 3 255/         JMP     .30
885: 1 0 0 158          SEE     CHAR:
886: 5 0 3 255/         JMP     .34
887: 5 0 3 255/         JMP     .26
888: 6 1 1 150     .12  ST    1 MODE
889: 1 0 0 180          SEE     CHARD
890: 5 0 3 255/         JMP     .29
891: 0 0 2   8          ADD             8
892: 5 0 3  85          JMP     .14
893: 6 1 1 150     .13  ST    1 MODE
894: 1 0 2 178          MSEE    CHARB
895: 5 0 3 255/         JMP     .33
896: 0 0 2   1     .34  ADD             1
897: 0 0 2   3     .33  ADD             3
898: 0 0 2   1     .30  ADD             1
899: 0 0 2   3     .29  ADD             3
900: 0 0 2   1     .26  ADD             1
901: 0 0 2   1     .25  ADD             1
902: 0 0 2   1     .24  ADD             1
903: 0 0 2   1     .23  ADD             1
904: 0 0 2   2     .22  ADD             2
905: 6 0 2 115     .20  INC     TEMP
906: 5 0 3  68          JMP     .3
907: 6 2 0   0     .62  GET   2                    PUT NEW MASK INTO THE TABLE
908: 7 0 0 190          INX     NMASKS
909: 0 3 0   0          TST
910: 6 0 0 190          GET     NMASKS
911: 2 0 3  16          MNGE            16         TOO MANY MASKS?
912: 6 0 2 190          INC     NMASKS
913: 0 1 1   0     .61  ORR
914: 0 0 1   0          LOD             0
915: 1 0 0 151          SEE     CHAR-              NOW LOOK FOR - OR CR
```

```
916: 0 0 2 151            ADD      CHAR-
917: 1 0 0 143            SEE      CHARCR
918: 0 0 2 143            ADD      CHARCR
919: 1 0 2 142            MSEE     CHAR)
920: 4 2 0 244            MCALL    NUMEXP          PUT EXPRESSION INTO ACCUMULATOR
921: 6 2 3   0            XCH   2
922: 7 1 1 202            CMP   1  =PNS-           PRINT IT
923: 3 0 1   0            NEQ                  0
924: 7 0 1 185            CMP      =PC-P           CONDITIONAL PRINT - OR CR
925: 5 2 0   3            JMP   2  EOS

926: 0 0 1 249  OPEN      LOD      =OC             OPEN
927: 5 0 3 255/           JMP      FORM
928: 4 0 3 255/ ADVANC    CALL     LEFTRT
929: 0 0 2 245            ADD      =AL             ADVANCE LEFT OR RIGHT
930: 1 0 0  57            SEE      "TO
931: 0 0 3   4            SUB                  4  CHANGE AL TO ALTO
932: 5 0 3 159/           JMP      FORM
933: 4 0 3 160/ PAGE      CALL     LEFTRT
934: 3 0 0   1            EQ                   1
935: 0 0 2   1            ADD                  1  CHANGE LLLR TO LRLR
936: 0 0 2 252            ADD      =LLLR
937: 4 2 0  77  FORM      MCALL    CONST
938: 7 2 0   0  FORM1     INX   2
939: 7 2 1   0            CMP   2              0  COMPILE A FORMS INSTRUCTION
940: 5 0 0   3            JMP      EOS
941: 1 0 0  51  LEFTRT    SEE      "LEFT           THIS SUBROUTINE ADDS 1 TO STACK ENTRY IF
942: 7 0 2   0            XT                       THE WORD "RIGHT" IS SEEN
943: 1 0 0  52            SEE      "RIGHT
944: 6 2 2   0            INC   2
945: 7 0 2   0            XT
946: 7 1 1   4  ALARM     CMP   1  =ALARM
947: 5 0 0   3            JMP      EOS

948: 1 0 2 101  CLEAR     MSEE     ID1
949: 6 0 0 180            GET      TLOC
950: 7 1 1  77            CMP   1  =LDES           CLEAR STATEMENT:  LDES VAR
951: 6 0 0 170            GET      TSIZ
952: 7 1 1  78            CMP   1  =CLRN                 CLRN SIZE
953: 5 0 0   3            JMP      EOS

954: 6 2 3   0  BIT       XCH   2
955: 7 1 0   0            INX   1
956: 0 0 2   0            ADD                      DOUBLE TOP OF STACK
957: 1 0 0 128            SEE      CHAR0
958: 7 1 2   0            XT    1
959: 1 0 1 129            NSEE     CHAR1
960: 5 1 0 156            JMP   1  XFALSE
961: 0 0 2   1            ADD                  1
962: 7 1 2   0            XT    1
963: 0 0 1   0  EIGHTB    LOD                  0  EIGHT BITS:
964: 6 0 1 115            ST       TEMP
965: 4 1 3 186  .1        NCALL    BIT
966: 7 0 3   0            XF                      EXIT FALSE IF NO 8 BITS
967: 6 0 2 115            INC      TEMP
968: 6 0 0 115            GET      TEMP
969: 3 1 0   8            EQ    1              8
970: 7 1 2   0            XT    1                 OR EXIT TRUE WITH BINARY VALUE ON STACK
971: 5 0 3 197            JMP      .1

972: 1 0 2 174  CODE      MSEE     CHAR(           CODE STATEMENT
973: 4 2 3 195            MCALL    EIGHTB          GET OPCODE
974: 1 0 2 148            MSEE     CHAR,
975: 4 1 3 195            NCALL    EIGHTB          GET PARAMETER
976: 4 0 2  66            CALL     ARGMNT
977: 1 0 2 142  .1        MSEE     CHAR)
978: 4 0 1  85            CALL     CLEARX          SET INDEX REGISTER CONTENTS UNDEFINED
979: 5 0 3 170            JMP      FORM1

980: 1 0 2 149  EOP       MSEE     CHAR.           END OF PROGRAM
981: 3 1 2   5            MEQ   1              5  ALL BEGINS MUST HAVE BEEN MATCHED
982: 0 0 1   0            LOD                  0
983: 4 0 2  23            CALL     FIXUP           FIXUP LOCATION 000.0, SO OBJECT PROGRAM
984: 6 0 0 190            GET      NMASKS             ESSENTIALLY BRANCHES HERE FIRST
985: 3 0 0   0  .1        EQ                   0
986: 5 0 3 255/           JMP      .2              PUNCH THE MASKS
987: 0 0 3   1            SUB                  1
988: 7 1 0   0            INX   1
989: 0 3 1   0            TGET                 0
990: 4 0 2  46            CALL     PCHCNS
991: 5 1 3 217            JMP   1  .1
```

```
 992:  6  0  0  130     .2      GET       LOCV
 993:  7  0  0  110              INX       LOCP
 994:  0  0  1    2              LOD                2
 995:  7  1  1   82              CMP     1 =LBR                LOAD PROTECTION BOUNDS
 996:  7  0  1   81              CMP       =LUR
 997:  0  0  2    1              ADD                1
 998:  7  1  1  193              CMP     1 =LPNR
 999:  0  0  1    0              LOD                0          LOAD PRINT MASK REGISTER
1000:  7  1  1   36              CMP     1 =BRU01
1001:  0  1  3  231              PCH                B11100111  PUT FINAL CODE ON TAPE TO MARK THE END
1002:  0  0  0    0              HLT
```

```
 -1  /EQU
              0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0
              0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0
              0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0
              0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0
              0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0
              0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0
              0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0
              0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0
              0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0
              0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0
              0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0
              0     0     0
  0  /HLT
           1002
  1  /LOD
            999   994   982   963   926   914   837   835   831   827   825   795   792   784   765   761
            749   740   738   736   723   697   695   665   663   636   626   619   614   598   568   553
            525   518   491   490   489   488   487   485   481   472   465   463   462   443   438   400
            397   364   363   361   347   341   337   300   298   296   294   288   286   268   248   242
            240   234   233   223   218   209   206   198   127    99    93    37    26    14     8     6
              0
  2  /ADD
            997   961   956   936   935   929   918   916   904   903   902   901   900   899   898   897
            896   891   864   834   830   687   678   673   656   631   574   561   538   527   514   507
            492   483   380   331   303   212   188   142   129   115    96    90    84    39    19     0
  3  /SUB
            987   931   877   860   752   620   605   559   410   317   190   184   113    75     0
  4  /TEN
             82     0
  5  /ORR
            913   870   743   711   622   372   322   310   202   177    31     0
  6  /SLC
            873   861   857   836   813   741   707   542   382   201   176   162    29     0
  7  /PCH
           1001   571   565   562   552   550   547   544   540     0
  8  /XEC
            478   278   267   247   228     0
 12  /TST
            909     0
 13  /TGET
            989     0
 14  /SET
            138   117    28     0
 15  /MASK
            878     0
 16  /SCMP
            432   420   419   414     0
 17  /XOR
            563   541     0
 18  /SRC
            871   869   866   628   572   548   537   385   373   321   311    91     0
 32  /SEE
            957   943   941   930   917   915   889   885   883   855   853   851   849   847   845   843
            841   839   833   829   819   816   755   685   654   616   609   530   526   501   496   482
            466   455   369   357   348   252   250   221   178   153   148   144   128   120   118    74
             38    18    12    10     0
 33  /NSEE
            959   806   798   780   759   747   733   708   661   593   523   494   470   457   452   445
            366   359   350   238   220   216   210   180   165   155   132   104    68    40    16     0
 34  /MSEE
            980   977   974   972   948   919   894   809   787   771   769   768   757   751   746   720
            718   712   705   644   638   635   618   611   590   587   522   500   484   476   473   468
            448   442   437   428   404   208   189   150   139   131   110   103    88    86    44    23
              5     0
 35  /MNSEE
              0
 64  /GE
            867   862   859   629   513   408    71    70     0
 65  /NGE
            506     0
 66  /MGE
            703   658     0
 67  /MNGE
            911   858   475    42     0
 96  /EQ
            985   969   934   875   679   649   640   580   431   418   412   386   383   374   370   329
            323   301   229   146     3     0
 97  /NEQ
            923   700   693   690   683   669   652   575   391   378   325   312   307   292   284   275
            264    95     0
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 98  /MEQ
          981   800   763   754    25     0
 99  /MNEQ
          332   135   122   107     0
128  /CALL
          990   983   978   976   933   928   810   804   789   774   764   744   730   726   721   714
          596   595   581   535   503   498   461   459   454   401   388   355   276   265   258   256
          254   230   225   205   203   196   192   172   170   157   145   119    35    33    21     2
            0     0
132  /NCALL
          975   965   724   583   578   531   450   244   222   214   194   167    79    77     0
136  /MCALL
          973   937   920   818   808   790   782   772   719   713   710   706   667   637   621   532
          493   474   447   441   439   436   429   405   403   274   263   219   186   182   136   108
           87     0
140  /MNCAL
            0
160  /JMP
          991   986   979   971   960   953   947   940   932   927   925   906   895   892   890   887
          886   884   880   879   876   868   865   863   856   854   852   850   848   846   844   842
          840   824   822   820   817   811   805   803   799   797   783   781   767   760   758   756
          748   734   732   729   725   722   717   709   702   698   691   688   686   684   680   670
          660   657   655   653   650   643   641   633   630   617   613   610   597   594   586   584
          582   579   577   576   557   534   529   524   510   504   502   499   497   495   471   469
          467   460   458   456   453   451   446   444   440   435   427   424   421   413   402   399
          393   392   387   384   381   379   376   375   371   358   354   349   333   330   326   324
          313   308   302   297   262   259   257   253   251   241   217   213   204   197   193   185
          181   179   171   168   163   158   154   149   147   133   123   121   105    98    85    72
           67    66    65    64    63    62    61    60    59    58    57    56    55    54    53    52
           51    50    49    48    47    46    36    34    22    17    13    11     4     1     0
192  /GET
          992   984   968   951   949   910   907   874   872   794   788   778   775   770   742   735
          699   692   689   676   671   648   645   634   624   604   601   591   588   569   558   545
          520   517   512   505   430   423   417   416   406   395   394   377   367   352   334   328
          320   319   309   305   291   283   226   173   164   159   140   134   125   124   111   106
           94    69    41    32    30    24     0
193  /ST
          964   893   888   882   838   832   828   826   776   766   750   739   696   681   674   666
          664   615   606   600   592   573   567   560   554   511   411   390   365   362   345   344
          343   342   339   336   299   289   269   249   243   169   151   143   137   126   116   114
          109   101   100    97    27    15     9     7     0
194  /INC
          967   944   912   905   881   745   675   647   422   415   389   315    92     0
195  /XCH
          954   921   801   779   585   566   556   536   479   426   409   398   353   200    81     0
224  /INX
          993   988   955   938   908   753   682   677   672   668   651   639   625   602   599   570
          564   551   549   546   543   539   515   508   477   433   407   368   338   335   327   318
          314   306   304   277   266   246   231   227   187   183   141   130   112   102    89    83
           73    45    43     0
225  /CMP
         1000   998   996   995   952   950   946   939   924   922   823   821   814   812   802   796
          793   791   786   785   777   773   762   737   731   728   727   716   715   701   694   659
          646   642   632   627   612   608   607   603   533   528   519   516   509   434   425   295
          287   282   281   280   273   272   271   261   260   237   236   232   224   175   174   161
          160    20     0
226  /XT
          970   962   958   945   942   815   704   662   623   589   555   521   486   480   464   449
          396   356   346   316   293   290   285   279   270   255   239   235   211   207   199   191
          166   152    80    76     0
227  /XF
          966   807   360   351   340   245   215   195   156    78     0
100  PARITY
          554   551     0
110  LOCP
          993   794   778   775   742   735   634   624   545   517    30     0
120  TYP
          750   739   134   130   106   102   100    97     9     0
130  LOCV
          992   745   560   558   151   143   141   126   124   114   111     0
140  SIZ
          101     7     0
150  MODE
          893   888   882   838   832   828   766   615   385     0
160  CHAR
          367    69    41     0
170  TSIZ
          951   352   140   137   112   109    27    24     0
180  TLOC
          949   770   753   645   591   588   334   309   306   299   173   169   164   159   125   116
           32     0
```

```
190  NMASKS
          984   912   910   908   874     0
  0  XREQ
          600   339   328   315     0
105  ASTATE
          291   289   283   269   249   243    15     0
115  TEMP
          968   967   964   905   872   826   699   696   692   674   671   664   573   569   567   520
          511   423   411     0
125  HOLD
          681   676   672   666   395   390     0
135  ARG
          606   604   592     0
145  SPEC
          788   776     0
155  TEMP1
          394   389   362     0
  1  XCONT
          336   319   305     0
  2  XCONT1
          342     0
  0  "ADD
            0
  1  "ADVAN
            0
  2  "ALPHA
            0
  3  "ALARM
            0
  4  "BEGIN
            0
  5  "CALL
            0
  6  "CLEAR
            0
  7  "CODE
          468     0
  8  "END
            0
  9  "ENTER
            0
 10  "GO
          496     0
 11  "IF
            0
 12  "KEY
          470     0
 13  "NUMER
            0
 14  "OPEN
            0
 15  "PAGE
          482     0
 16  "PRINT
            0
 17  "SET
            0
 18  "SUBTR
            0
 19  "TYPE
            0
 20  "UNLES
            0
 50  "FROM
          771   442     0
 51  "LEFT
          941   819     0
 52  "RIGHT
          943     0
 53  "NEGAT
          466     0
 54  "OVRFL
          484     0
 55  "ROUTN
          759   733   635     0
 56  "LOOP
          798   768     0
 57  "TO
          930   787   522   500   437     0
 58  "BY
          780     0
```

```
100  ID0
         131  103    0
101  ID1
         948  769  153    0
102  ID2
         348    0
103  ID3
         350    0
104  ID4
         746  590    0
105  ID5
         751  357  155    0
106  ID6
         644  587  530  501   12    0
128  CHAR0
         957  210   75   70    0
129  CHAR1
         959  208    0
130  CHAR2
         845    0
138  CHAR8
         829   71    0
141  CHAR#
         833  526  523   18   16    0
142  CHAR)
         977  919  809  757  720  712  611  476  448  189  150  139  110   88    0
143  CHARCR
         918  917    0
144  CHAR/
         238  221    0
147  CHAR=
         452  428  404  144  118    0
148  CHAR,
         974  883  755  708  685  654  609  494  148  120    0
149  CHAR.
         980  843    5    0
150  CHAR)
         661    0
151  CHAR-
         916  915  457  252  180    0
154  CHAR"
         380  370  359    0
155  CHAR+
         455  250  178    0
158  CHAR:
         885  638   23    0
163  CHARS
         849    0
168  CHARX
         855    0
170  CHARZ
         839    0
171  CHAR%
         853    0
173  CHAR*
         220  216   38    0
174  CHAR(
         972  816  806  747  718  705  593  473  445  165  132  128  104   86    0
176  CHAR>
          10    0
177  CHARA
         616    0
178  CHARB
         894  851  618    0
180  CHARD
         889  841    0
185  CHARI
         847    0
200  INVALD
         366   68   40    0
  0  =STOP
         796  777  737  632  519    0
  1  =SKL
         463    0
  2  =SKT
         485    0
  4  =ALARM
         946    0
  4  =EX-SK
         514  507    0
  8  =SKA
```

```
          465    0
 10  =SKK
          472    0
 12  =EXA
          793    0
 32  =BRU0
          802  740  627  550   26    0
 33  =BRU1
          646  533    0
 36  =BRU01
         1000    0
 17  =LIR
          603    0
 64  =RETPT
           20    0
 67  =LKBR
          715  607  160    0
 68  =LIB
          161    0
 69  =SIB
          608    0
 71  =PRUT
          432  419    0
 72  =RETRN
          528    0
 75  =PAL
          823    0
 77  =LDES
          950    0
 78  =CLRN
          952    0
 81  =LUR
          996    0
 82  =LBR
          995    0
129  =SRJ
          612    0
139  =SRR
          762    0
151  =NERCM
          716    0
152  =TKM
          728    0
153  =TK
          731    0
163  =LTKMR
          727    0
164  =LSR
          224    0
165  =INK
          785  261  237    0
167  =TAIR
          812  175    0
169  =PA
          821    0
185  =PC-P
          924    0
193  =LPNR
          998    0
195  =PKA
          694    0
198  =LPKR
          659    0
199  =PKB
          701    0
202  =PNS-
          922    0
208  =ADK
          272    0
210  =SUK
          281    0
211  =NOP
          642    0
217  =TRM
          773  420  400  287    0
221  =TRA
          425  414  295  260  236  174    0
225  =ADA
          273  271    0
227  =SUA
          791  280    0
```

```
229  =MUL
          218     0
233  =ADM
          786   438     0
235  =SUM
          443   282     0
237  =DIV
          240     0
245  =AL
          929     0
249  =DC
          926     0
251  =POS
          814     0
252  =LLLR
          936     0
  0  RSTART
           34     0
341  CLEARX
          978   774   535   341    21     0
  6  PROGC
            6     1
  2  EOS1
            4     2
535  FIXUP
          983   789   764   535     2
  3  EOS
          953   947   940   925   824   822   732   729   717   660   613   534   529   435     3
  5  EOS2
          123     5
765  COMENT
          765    11
 23  LABEL
           23    13
 14  STATE
          499    36    14
 35  STATE1
           35    22    17
556  PCHCN1
          556    33
804  POSITN
          804    35
436  ADD
          436    47
928  ADVANC
          928    48
 86  ALPHA
           86    49
946  ALARM
          946    50
733  BEGIN
          733    51
590  CALL
          590    52
948  CLEAR
          948    53
972  CODE
          972    54
759  END
          759    55
705  ENTER
          705    56
522  GO
          522    57
493  IF
          493    58
624  KEY
          624    59
 99  NUMERC
           99    60
926  OPEN
          926    61
933  PAGE
          933    62
816  PRINT
          816    63
400  SET
          400    64
441  SUBTRA
          441    65
718  TYPE
```

```
                718   66
492  UNLESS
                492   67
 68  DIGIT
                621  203  196  194   79   77   68
156  XFALSE
                960  156   72
 77  CONST
                937  804  719  710  706  474  186  182  136  108   87   77
101  DECL
                101   98
102  VNL
                121  102
124  VNL1
                145  124  119
122  EOD
                797  767  758  748  122
158  NUMVAR
                713  439  401  192  167  153
164  NVAR1
                531  354  164  154
155  NVAR2
                724  532  155
157  NVAR4
                399  157
300  FINDX
                300  170  157
165  NVAR3
                165  163
283  FREEA
                283  225  172
192  PRIMRY
                578  219  214  192
558  PCHCNS
                990  744  581  558  388  230  205
208  POWTEN
                222  208
214  TERM
                274  263  244  214
242  NUMEX1
                790  782  242
244  NUMEXP
                920  808  772  450  441  436  429  244
291  LOADA
                461  291  276  265  254
263  ADDTRM
                459  263  256
274  SUBTRM
                454  274  258
289  FREEA1
                297  289
298  FINDXX
                810  596  298
347  ALPHVR
                721  403  355  347
355  ALPHEX
                818  583  405  355
430  SET2
                440  430  427
439  ADDSUB
                444  439
445  CONDIT
                493  447  445
511  IFSUB
                511  503  498
528  GO2
                523  504
531  GO1
                531  510
551  ENDMSG
                577  551
562  PCHCN2
                562  557
578  ARGMNT
                976  595  578
614  PSK
                667  637  614
661  PSKLST
                730  726  714  661
768  BLOOP
                768  734
```

```
798   ELOOP
                798   760
764   END1
                803   764
980   EOP
                980   799
937   FORM
                937   932   927
941   LEFTRT
                941   933   928
938   FORM1
                979   938
954   BIT
                965   954
963   EIGHTB
                975   973   963
```

```
IDENTIFIER TABLE ENTRY FOR ADD    SET TO TYPE 0, SIZE   0, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR ADVANC SET TO TYPE 0, SIZE   1, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR ALPHA  SET TO TYPE 0, SIZE   2, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR ALARM  SET TO TYPE 0, SIZE   3, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR BEGIN  SET TO TYPE 0, SIZE   4, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR CALL   SET TO TYPE 0, SIZE   5, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR CLEAR  SET TO TYPE 0, SIZE   6, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR CODE   SET TO TYPE 0, SIZE   7, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR END    SET TO TYPE 0, SIZE   8, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR ENTER  SET TO TYPE 0, SIZE   9, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR GO     SET TO TYPE 0, SIZE  10, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR IF     SET TO TYPE 0, SIZE  11, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR KEY    SET TO TYPE 0, SIZE  12, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR NUMERI SET TO TYPE 0, SIZE  13, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR OPEN   SET TO TYPE 0, SIZE  14, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR PAGE   SET TO TYPE 0, SIZE  15, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR PRINT  SET TO TYPE 0, SIZE  16, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR SET    SET TO TYPE 0, SIZE  17, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR SUBTRA SET TO TYPE 0, SIZE  18, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR TYPE   SET TO TYPE 0, SIZE  19, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR UNLESS SET TO TYPE 0, SIZE  20, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR FROM   SET TO TYPE 0, SIZE  50, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR LEFT   SET TO TYPE 0, SIZE  51, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR RIGHT  SET TO TYPE 0, SIZE  52, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR NEGATI SET TO TYPE 0, SIZE  53, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR OVERFL SET TO TYPE 0, SIZE  54, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR ROUTIN SET TO TYPE 0, SIZE  55, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR LOOP   SET TO TYPE 0, SIZE  56, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR TO     SET TO TYPE 0, SIZE  57, LOCATION 128.
IDENTIFIER TABLE ENTRY FOR BY     SET TO TYPE 0, SIZE  58, LOCATION 128.
```

```
    0  401  85   1                                    5          02751467648          03170894720 0   0 0   0 0   0 0   0          1
  341  001   0   1                                    1          5          02751467648          0 0   0 0   0 0   0 0   0          2
  342  601   2   1                                    0          1          5          02751467648 0   0 0   0 0   0 0   0          3
  343  601   6   1                                    0          1          5          02751467648 0   0 0   0 0   0 0   0          4
  344  601  10   1                                    0          1          5          02751467648 0   0 0   0 0   0 0   0          5
  345  611  14   1                                    0          1          5          02751467648 0   0 0   0 0   0 0   0          6
  346  702   0   1                                    1          5          02751467648          0 0   0 0   0 0   0 0   0          7
    1  500   6   1                                    5          02751467648          03170894720 0   0 0   0 0   0 0   0          8
    6  001   0   1                                    5          02751467648          03170894720 0   0 0   0 0   0 0   0          9
    7  611140   1                                    0          5          02751467648          0 0   0 0   0 0   0 0   0         10
    8  001   6   1                                    5          02751467648          03170894720 0   0 0   0 0   0 0   0         11
    9  611120   1                                    6          5          02751467648          0 0   0 0   0 0   0 0   0         12
   10  100176   1                                    5          02751467648          03170894720 0   0 0   0 0   0 0   0         13
**************      >    "COMPREHENSIVE"  TEST,                                                                      *****             13
   11  502253   1                    >               5          02751467648          03170894720 0   0 0   0 0   0 0   0         14
  765  001   1   1                    >               5          02751467648          03170894720 0   0 0   0 0   0 0   0         15
  766  611150   1                    >               1          5          02751467648          0 0   0 0   0 0   0 0   0         16
  767  500122   1                    >               5          02751467648          03170894720 0   0 0   0 0   0 0   0         17
  122  303   2   1                    >               5          02751467648          03170894720 0   0 0   0 0   0 0   0         18
  123  500   5   1                    >               5          02751467648          03170894720 0   0 0   0 0   0 0   0         19
    5  102149   1                    >               5          02751467648          03170894720 0   0 0   0 0   0 0   0         20
**************                                                                                                      *****             20
**************                          OF     S E L L.                                                             *****             20
    6  001   0   2      OF     S  E  L  L.             5          02751467648          03170894720 0   0 0   0 0   0 0   0         21
    7  611140   2      OF     S  E  L  L.             0          5          02751467648          0 0   0 0   0 0   0 0   0         22
    8  001   6   2      OF     S  E  L  L.             5          02751467648          03170894720 0   0 0   0 0   0 0   0         23
    9  611120   2      OF     S  E  L  L.             6          5          02751467648          0 0   0 0   0 0   0 0   0         24
   10  100176   2      OF     S  E  L  L.             5          02751467648          03170894720 0   0 0   0 0   0 0   0         25
**************  NUMERIC I,J,P(12) = Q(12)=(R (10) = S, T=(U=V(1)),W).                                                *****             25
   12  100106   1                NUMERIC             5          02751467648          03170894720 0   0 0   0 0   0 0   0         26
   14  001   0   1                NUMERIC             5          02751467648          03170894720 0   0 0   0 0   0 0   0         27
   15  601105   1                NUMERIC             0          5          02751467648          0 0   0 0   0 0   0 0   0         28
   16  101141   1                NUMERIC             0          5          02751467648          0 0   0 0   0 0   0 0   0         29
   17  510  35   1                NUMERIC             0          5          02751467648          0 0   0 0   0 0   0 0   0         30
   35  403  36   1                NUMERIC             5          02751467648          03170894720 0   0 0   0 0   0 0   0         31
  804  400  77   1                NUMERIC            36          5          02751467648          0 0   0 0   0 0   0 0   0         32
   77  410  68   1                NUMERIC           805          36         5          02751467648 0   0 0   0 0   0 0   0         33
   68  101200   1                NUMERIC            78         805         36         5          0 0   0 0   0 0   0 0   0         34
   69  600160   1                NUMERIC            78         805         36         5          0 0   0 0   0 0   0 0   0         35
   70  200128   1                NUMERIC            13          78        805         36         5 0   0 0   0 0   0 0   0         36
   72  510156   1                NUMERIC            13          78        805         36         5 0   0 0   0 0   0 0   0         37
  156  703   0   1                NUMERIC            78         805         36         5          0 0   0 0   0 0   0 0   0         38
   78  703   0   1                NUMERIC           805          36         5          02751467648 0   0 0   0 0   0 0   0         39
  806  101174   1                NUMERIC            36          5          02751467648          0 0   0 0   0 0   0 0   0         40
  807  703   0   1                NUMERIC            36          5          02751467648          0 0   0 0   0 0   0 0   0         41
   37  001   0   1                NUMERIC             5          02751467648          03170894720 0   0 0   0 0   0 0   0         42
   38  100173   1                NUMERIC             0          5          02751467648          0 0   0 0   0 0   0 0   0         43
   40  101200   1                NUMERIC             0          5          02751467648          0 0   0 0   0 0   0 0   0         44
   41  600160   1                NUMERIC             0          5          02751467648          0 0   0 0   0 0   0 0   0         45
   42  203  25   1                NUMERIC            13          0          5          02751467648 0   0 0   0 0   0 0   0         46
   43  710   0   1                NUMERIC            13          0          5          02751467648 0   0 0   0 0   0 0   0         47
   44  102  13   1                NUMERIC            13          0          5          02751467648 0   0 0   0 0   0 0   0         48
   45  700   0   1                NUMERIC            13          0          5          02751467648 0   0 0   0 0   0 0   0         49
   46  500  60   1                NUMERIC             0          5          02751467648          0 0   0 0   0 0   0 0   0         50
   60  510  99   1                NUMERIC             0          5          02751467648          0 0   0 0   0 0   0 0   0         51
   99  001   1   1                NUMERIC             5          02751467648          03170894720 0   0 0   0 0   0 0   0         52
  100  601120   1                NUMERIC             1          5          02751467648          0 0   0 0   0 0   0 0   0         53
  101  611140   1                NUMERIC             1          5          02751467648          0 0   0 0   0 0   0 0   0         54
  102  700120   1                NUMERIC             5          02751467648          03170894720 0   0 0   0 0   0 0   0         55
  103  102101   1                NUMERIC             5          02751467648          03170894720 0   0 0   0 0   0 0   0         56
IDENTIFIER TABLE ENTRY FOR I       SET TO TYPE 1, SIZE   1, LOCATION 254.
  104  101174   1                  NUMERIC I         5          02751467648          03170894720 0   0 0   0 0   0 0   0         57
  105  500111   1                NUMERIC  I,         5          02751467648          03170894720 0   0 0   0 0   0 0   0         58
  111  600130   1                NUMERIC  I,         5          02751467648          03170894720 0   0 0   0 0   0 0   0         59
  112  700170   1                NUMERIC  I,       253          5          02751467648          0 0   0 0   0 0   0 0   0         60
  113  003   0   1                NUMERIC  I,       253          5          02751467648          0 0   0 0   0 0   0 0   0         61
  114  601130   1                NUMERIC  I,       253          5          02751467648          0 0   0 0   0 0   0 0   0         62
  115  002   1   1                NUMERIC  I,       253          5          02751467648          0 0   0 0   0 0   0 0   0         63
  116  611180   1                NUMERIC  I,       254          5          02751467648          0 0   0 0   0 0   0 0   0         64
  117  032   0   1                NUMERIC  I,         5          02751467648          03170894720 0   0 0   0 0   0 0   0         65
IDENTIFIER TABLE ENTRY FOR I       SET TO TYPE 1, SIZE   1, LOCATION 254.
  118  100147   1                NUMERIC  I,         5          02751467648          03170894720 0   0 0   0 0   0 0   0         66
  120  100148   1                NUMERIC  I,         5          02751467648          03170894720 0   0 0   0 0   0 0   0         67
  121  500102   1                NUMERIC  I,         5          02751467648          03170894720 0   0 0   0 0   0 0   0         68
  102  700120   2                NUMERIC  I,         5          02751467648          03170894720 0   0 0   0 0   0 0   0         69
  103  102101   2                NUMERIC  I,         5          02751467648          03170894720 0   0 0   0 0   0 0   0         70
IDENTIFIER TABLE ENTRY FOR J       SET TO TYPE 1, SIZE   1, LOCATION 253.
  104  101174   2              NUMERIC  I,J         5          02751467648          03170894720 0   0 0   0 0   0 0   0         71
  105  500111   2            NUMERIC  I,J,         5          02751467648          03170894720 0   0 0   0 0   0 0   0         72
  111  600130   2            NUMERIC  I,J,         5          02751467648          03170894720 0   0 0   0 0   0 0   0         73
  112  700170   2            NUMERIC  I,J,       252          5          02751467648          0 0   0 0   0 0   0 0   0         74
```

```
 113  003   0   2          NUMERIC I,J,          252          5          02751467648          0 0   0 0   0 0   0 0   0        75
 114  601130  2          NUMERIC I,J,          252          5          02751467648          0 0   0 0   0 0   0 0   0        76
 115  002   1   2          NUMERIC I,J,          252          5          02751467648          0 0   0 0   0 0   0 0   0        77
 116  611180  2          NUMERIC I,J,          253          5          02751467648          0 0   0 0   0 0   0 0   0        78
 117  032   0   2          NUMERIC I,J,            5          02751467648          03170894720 0   0 0   0 0   0 0   0        79
IDENTIFIER TABLE ENTRY FOR J          SET TO TYPE 1, SIZE   1, LOCATION 253.
 118  100147  2          NUMERIC I,J,            5          02751467648          03170894720 0   0 0   0 0   0 0   0        80
 120  100148  2          NUMERIC I,J,            5          02751467648          03170894720 0   0 0   0 0   0 0   0        81
 121  500102  2          NUMERIC I,J,            5          02751467648          03170894720 0   0 0   0 0   0 0   0        82
 102  700120  3          NUMERIC I,J,            5          02751467648          03170894720 0   0 0   0 0   0 0   0        83
 103  102101  3          NUMERIC I,J,            5          02751467648          03170894720 0   0 0   0 0   0 0   0        84
IDENTIFIER TABLE ENTRY FOR P          SET TO TYPE 1, SIZE   1, LOCATION 252.
 104  101174  3            NUMERIC I,J,P         5        5082751467648          03170894720 0   0 0   0 0   0 0   0        85
 106  600120  1          NUMERIC I,J,P(          5        5082751467648          03170894720 0   0 0   0 0   0 0   0        86
 107  313   3   1          NUMERIC I,J,P(          1          5          5082751467648          0 0   0 0   0 0   0 0   0        87
 108  420  77   1          NUMERIC I,J,P(          5        5082751467648          03170894720 0   0 0   0 0   0 0   0        88
  77  410  68   2          NUMERIC I,J,P(        109          5          5082751467648          0 0   0 0   0 0   0 0   0        89
  68  101200  2          NUMERIC I,J,P(         78        109          5          5082751467648 0   0 0   0 0   0 0   0        90
  69  600160  2        NUMERIC I,J,P(1         78        109          5          5082751467648 0   0 0   0 0   0 0   0        91
  70  200128  2        NUMERIC I,J,P(1        129         78        109          5          508 0   0 0   0 0   0 0   0        92
  71  200138  1        NUMERIC I,J,P(1        129         78        109          5          508 0   0 0   0 0   0 0   0        93
  73  710   0   1        NUMERIC I,J,P(1        129         78        109          5          508 0   0 0   0 0   0 0   0        94
  74  100129  1        NUMERIC I,J,P(1        129         78        109          5          508 0   0 0   0 0   0 0   0        95
  75  003128  1        NUMERIC I,J,P(1        129         78        109          5          508 0   0 0   0 0   0 0   0        96
  76  712   0   1        NUMERIC I,J,P(1          1         78        109          5          508 0   0 0   0 0   0 0   0        97
  79  410  68   1        NUMERIC I,J,P(1          1        109          5          5082751467648 0   0 0   0 0   0 0   0        98
  68  101200  3        NUMERIC I,J,P(1         80          1        109          5          508 0   0 0   0 0   0 0   0        99
  69  600160  3      NUMERIC I,J,P(12         80          1        109          5          508 0   0 0   0 0   0 0   0       100
  70  200128  3      NUMERIC I,J,P(12        130         80          1        109          5 0   0 0   0 0   0 0   0       101
  71  200138  2      NUMERIC I,J,P(12        130         80          1        109          5 0   0 0   0 0   0 0   0       102
  73  710   0   2      NUMERIC I,J,P(12        130         80          1        109          5 0   0 0   0 0   0 0   0       103
  74  100130  2      NUMERIC I,J,P(12        130         80          1        109          5 0   0 0   0 0   0 0   0       104
  75  003128  2      NUMERIC I,J,P(12        130         80          1        109          5 0   0 0   0 0   0 0   0       105
  76  712   0   2      NUMERIC I,J,P(12          2         80          1        109          5 0   0 0   0 0   0 0   0       106
  81  623   0   1      NUMERIC I,J,P(12          2          1        109          5          508 0   0 0   0 0   0 0   0       107
  82  010   0   1      NUMERIC I,J,P(12          1          2        109          5          508 0   0 0   0 0   0 0   0       108
  83  700   0   1      NUMERIC I,J,P(12         10          2        109          5          508 0   0 0   0 0   0 0   0       109
  84  002  10   1      NUMERIC I,J,P(12          2        109          5          5082751467648 0   0 0   0 0   0 0   0       110
  85  500  79   1      NUMERIC I,J,P(12         12        109          5          5082751467648 0   0 0   0 0   0 0   0       111
  79  410  68   2      NUMERIC I,J,P(12         12        109          5          5082751467648 0   0 0   0 0   0 0   0       112
...;;
  71  200138  3    UMERIC I,J,P(12)        142         80          12        109          5 0   0 0   0 0   0 0   0       116
  72  510156  2    UMERIC I,J,P(12)        142         80          12        109          5 0   0 0   0 0   0 0   0       117
 156  703   0   2    UMERIC I,J,P(12)         80         12        109          5          508 0   0 0   0 0   0 0   0       118
  80  712   0   1    UMERIC I,J,P(12)         12        109          5          5082751467648 0   0 0   0 0   0 0   0       119
 109  611170  1    UMERIC I,J,P(12)         12          5          5082751467648          0 0   0 0   0 0   0 0   0       120
 110  102142  1    UMERIC I,J,P(12)          5          5082751467648          03170894720 0   0 0   0 0   0 0   0       121
 111  600130  3    UMERIC I,J,P(12)          5          5082751467648          03170894720 0   0 0   0 0   0 0   0       122
 112  700170  3    UMERIC I,J,P(12)        251          5          5082751467648          0 0   0 0   0 0   0 0   0       123
 113  003  11   3    UMERIC I,J,P(12)        251          5          5082751467648          0 0   0 0   0 0   0 0   0       124
 114  601130  3    UMERIC I,J,P(12)        240          5          5082751467648          0 0   0 0   0 0   0 0   0       125
 115  002   1   3    UMERIC I,J,P(12)        240          5          5082751467648          0 0   0 0   0 0   0 0   0       126
 116  611180  3    UMERIC I,J,P(12)        241          5          5082751467648          0 0   0 0   0 0   0 0   0       127
 117  032   0   3    UMERIC I,J,P(12)          5          5082751467648          03170894720 0   0 0   0 0   0 0   0       128
IDENTIFIER TABLE ENTRY FOR P          SET TO TYPE 1, SIZE  12, LOCATION 241.
 118  100147  3    UMERIC I,J,P(12)          5        331327751467648          03170894720 0   0 0   0 0   0 0   0       129
 119  400124  1    ERIC I,J,P(12) =          5        331327751467648          03170894720 0   0 0   0 0   0 0   0       130
 124  600130  1    ERIC I,J,P(12) =        120          5          331327751467648          0 0   0 0   0 0   0 0   0       131
 125  600180  1    ERIC I,J,P(12) =        240        120          5          331327751467648 0   0 0   0 0   0 0   0       132
 126  611130  1    ERIC I,J,P(12) =        241        240        120          5          3313 0   0 0   0 0   0 0   0       133
 127  001   0   1    ERIC I,J,P(12) =        240        120          5          331327751467648 0   0 0   0 0   0 0   0       134
 128  100174  1    ERIC I,J,P(12) =          0        240        120          5          3313 0   0 0   0 0   0 0   0       135
IDENTIFIER TABLE ENTRY FOR Q          SET TO TYPE 1, SIZE   1, LOCATION 241.
 130  700120  1    IC I,J,P(12) = Q          0        240        120          5          3313 0   0 0   0 0   0 0   0       136
 131  102101  1    IC I,J,P(12) = Q          0        240        120          5          3313 0   0 0   0 0   0 0   0       137
 132  101174  1    IC I,J,P(12) = Q          0        240        120          5          3313 0   0 0   0 0   0 0   0       138
 134  600120  1    C I,J,P(12) = Q(          0        240        120          5          3313 0   0 0   0 0   0 0   0       139
 135  313   3   1    C I,J,P(12) = Q(          1          0        240        120          5 0   0 0   0 0   0 0   0       140
 136  420  77   1    C I,J,P(12) = Q(          0        240        120          5          3313 0   0 0   0 0   0 0   0       141
  77  410  68   3    C I,J,P(12) = Q(        137          0        240        120          5 0   0 0   0 0   0 0   0       142
...;;
  73  710   0   3      I,J,P(12) = Q(1        129         78        137          0        240 0   0 0   0 0   0 0   0       147
  74  100129  3      I,J,P(12) = Q(1        129         78        137          0        240 0   0 0   0 0   0 0   0       148
  75  003128  3      I,J,P(12) = Q(1        129         78        137          0        240 0   0 0   0 0   0 0   0       149
  76  712   0   3      I,J,P(12) = Q(1          1         78        137          0        240 0   0 0   0 0   0 0   0       150
  79  410  68   3      I,J,P(12) = Q(1          1        137          0        240        120 0   0 0   0 0   0 0   0       151
...;;
  81  623   0   2    I,J,P(12) = Q(12          2          1        137          0        240 0   0 0   0 0   0 0   0       160
  82  010   0   2    I,J,P(12) = Q(12          1          2        137          0        240 0   0 0   0 0   0 0   0       161
  83  700   0   2    I,J,P(12) = Q(12         10          2        137          0        240 0   0 0   0 0   0 0   0       162
  84  002  10   2    I,J,P(12) = Q(12          2        137          0        240        120 0   0 0   0 0   0 0   0       163
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  85 500 79  2   I,J,P(12) = Q(12          12        137          0        240        120 0   0 0   0 0   0 0   0       164
...:..
  72 510156  3   ,J,P(12) = Q(12)        142         80         12        137          0 0   0 0   0 0   0 0   0       170
 156 703   0  3   ,J,P(12) = Q(12)         80         12        137          0        240 0   0 0   0 0   0 0   0       171
  80 712   0  2   ,J,P(12) = Q(12)         12        137          0        240        120 0   0 0   0 0   0 0   0       172
 137 611170  1   ,J,P(12) = Q(12)         12          0        240        120          5 0   0 0   0 0   0 0   0       173
 138 032   0  1   ,J,P(12) = Q(12)          0        240        120          5       3313 0   0 0   0 0   0 0   0       174
IDENTIFIER TABLE ENTRY FOR Q          SET TO TYPE 1, SIZE  12, LOCATION 241.
 139 102142  1   ,J,P(12) = Q(12)          0        240        120          5       3313 0   0 0   0 0   0 0   0       175
 140 600170  1   ,J,P(12) = Q(12)          0        240        120          5       3313 0   0 0   0 0   0 0   0       176
 141 700130  1   ,J,P(12) = Q(12)         12          0        240        120          5 0   0 0   0 0   0 0   0       177
 142 002241  1   ,J,P(12) = Q(12)         12          0        240        120          5 0   0 0   0 0   0 0   0       178
 143 611130  1   ,J,P(12) = Q(12)        253          0        240        120          5 0   0 0   0 0   0 0   0       179
 144 100147  1   ,J,P(12) = Q(12)          0        240        120          5       3313 0   0 0   0 0   0 0   0       180
 145 400124  1   J,P(12) = Q(12)=          0        240        120          5       3313 0   0 0   0 0   0 0   0       181
 124 600130  2   J,P(12) = = Q(12)=      146          0        240        120          5 0   0 0   0 0   0 0   0       182
 125 600180  2   J,P(12) = = Q(12)=      253        146          0        240        120 0   0 0   0 0   0 0   0       183
 126 611130  2   J,P(12) = = Q(12)=      241        253        146          0        240 0   0 0   0 0   0 0   0       184
 127 001   0  2   J,P(12) = = Q(12)=      253        146          0        240        120 0   0 0   0 0   0 0   0       185
 128 100174  2   J,P(12) = Q(12)=          0        253        146          0        240 0   0 0   0 0   0 0   0       186
 129 002   1  1   ,P(12) = Q(12)=(         0        253        146          0        240 0   0 0   0 0   0 0   0       187
 130 700120  2   ,P(12) = Q(12)=(         1        253        146          0        240 0   0 0   0 0   0 0   0       188
 131 102101  2   ,P(12) = Q(12)=(         1        253        146          0        240 0   0 0   0 0   0 0   0       189
IDENTIFIER TABLE ENTRY FOR R          SET TO TYPE 1, SIZE   1, LOCATION 241.
 132 101174  2   P(12) = Q(12)=(R        1        253        146          0        240 0   0 0   0 0   0 0   0       190
 134 600120  2   12) = Q(12)=(R (        1        253        146          0        240 0   0 0   0 0   0 0   0       191
 135 313   3  2   12) = Q(12)=(R (        1          1        253        146          0 0   0 0   0 0   0 0   0       192
 136 420 77  2   12) = Q(12)=(R (        1        253        146          0        240 0   0 0   0 0   0 0   0       193
...:..
  81 623   0  3   ) = Q(12)=(R (10         0          1        137          1        253 0   0 0   0 0   0 0   0       212
  82 010   0  3   ) = Q(12)=(R (10         1          0        137          1        253 0   0 0   0 0   0 0   0       213
  83 700   0  3   ) = Q(12)=(R (10        10          0        137          1        253 0   0 0   0 0   0 0   0       214
  84 002  10  3   ) = Q(12)=(R (10         0        137          1        253        146 0   0 0   0 0   0 0   0       215
  85 500 79  3   ) = Q(12)=(R (10        10        137          1        253        146 0   0 0   0 0   0 0   0       216
...:..
  80 712   0  3     = Q(12)=(R (10)        10        137          1        253        146 0   0 0   0 0   0 0   0       224
 137 611170  2     = Q(12)=(R (10)        10          1        253        146          0 0   0 0   0 0   0 0   0       225
 138 032   0  2     = Q(12)=(R (10)         1        253        146          0        240 0   0 0   0 0   0 0   0       226
IDENTIFIER TABLE ENTRY FOR R          SET TO TYPE 1, SIZE  10, LOCATION 241.
 139 102142  2     = Q(12)=(R (10)         1        253        146          0        240 0   0 0   0 0   0 0   0       227
 140 600170  2     = Q(12)=(R (10)         1        253        146          0        240 0   0 0   0 0   0 0   0       228
 141 700130  2     = Q(12)=(R (10)        10          1        253        146          0 0   0 0   0 0   0 0   0       229
 142 002241  2     = Q(12)=(R (10)        10          1        253        146          0 0   0 0   0 0   0 0   0       230
 143 611130  2     = Q(12)=(R (10)       251          1        253        146          0 0   0 0   0 0   0 0   0       231
 144 100147  2     = Q(12)=(R (10)         1        253        146          0        240 0   0 0   0 0   0 0   0       232
 145 400124  2     Q(12)=(R (10) =         1        253        146          0        240 0   0 0   0 0   0 0   0       233
 124 600130  3     Q(12)=(R (10) =       146          1        253        146          0 0   0 0   0 0   0 0   0       234
 125 600180  3     Q(12)=(R (10) =       251        146          1        253        146 0   0 0   0 0   0 0   0       235
 126 611130  3     Q(12)=(R (10) =       241        251        146          1        253 0   0 0   0 0   0 0   0       236
 127 001   0  3     Q(12)=(R (10) =       251        146          1        253        146 0   0 0   0 0   0 0   0       237
 128 100174  3     Q(12)=(R (10) =         0        251        146          1        253 0   0 0   0 0   0 0   0       238
IDENTIFIER TABLE ENTRY FOR S          SET TO TYPE 1, SIZE   1, LOCATION 241.
 130 700120  3     (12)=(R (10) = S          0        251        146          1        253 0   0 0   0 0   0 0   0       239
 131 102101  3     (12)=(R (10) = S          0        251        146          1        253 0   0 0   0 0   0 0   0       240
 132 101174  3     (12)=(R (10) = S          0        251        146          1        253 0   0 0   0 0   0 0   0       241
 133 500140  1     12)=(R (10) = S,          0        251        146          1        253 0   0 0   0 0   0 0   0       242
 140 600170  3     12)=(R (10) = S,          0        251        146          1        253 0   0 0   0 0   0 0   0       243
 141 700130  3     12)=(R (10) = S,          1          0        251        146          1 0   0 0   0 0   0 0   0       244
 142 002241  3     12)=(R (10) = S,          1          0        251        146          1 0   0 0   0 0   0 0   0       245
 143 611130  3     12)=(R (10) = S,        242          0        251        146          1 0   0 0   0 0   0 0   0       246
 144 100147  3     12)=(R (10) = S,          0        251        146          1        253 0   0 0   0 0   0 0   0       247
 146 300   0  1     12)=(R (10) = S,          0        251        146          1        253 0   0 0   0 0   0 0   0       248
 147 510151  1     12)=(R (10) = S,          0        251        146          1        253 0   0 0   0 0   0 0   0       249
 151 611130  1     12)=(R (10) = S,        251        146          1        253        146 0   0 0   0 0   0 0   0       250
 152 702   0  1     12)=(R (10) = S,        146          1        253        146          0 0   0 0   0 0   0 0   0       251
 146 300   0  2     12)=(R (10) = S,          1        253        146          0        240 0   0 0   0 0   0 0   0       252
 148 100148  1     12)=(R (10) = S,          1        253        146          0        240 0   0 0   0 0   0 0   0       253
 149 500130  1     12)=(R (10) = S,          1        253        146          0        240 0   0 0   0 0   0 0   0       254
.....
IDENTIFIER TABLE ENTRY FOR T          SET TO TYPE 1, SIZE   1, LOCATION 251.
 133 500140  2     =(R (10) = S, T=          1        253        146          0        240 0   0 0   0 0   0 0   0       258
.....
 145 400124  3     =(R (10) = S, T=          1        253        146          0        240 0   0 0   0 0   0 0   0       264
.....
 129 002   1  2     (R (10) = S, T=(         0        252        146          1        253 0   0 0   0 0   0 0   0       270
.....
IDENTIFIER TABLE ENTRY FOR U          SET TO TYPE 1, SIZE   1, LOCATION 251.
 133 500140  3       (10) = S, T=(U=         1        252        146          1        253 0   0 0   0 0   0 0   0       274
.....
IDENTIFIER TABLE ENTRY FOR V          SET TO TYPE 1, SIZE   1, LOCATION 251.
 134 600120  3     10) = S, T=(U=V(          0        252        146          1        252 0   0 0   0 0   0 0   0       289
```

```
  135 313   3   3    10) = S, T=(U=V(          1          0        252        146          1 0   0 0   0 0   0 0   0       290
  136 420  77   3    10) = S, T=(U=V(          0        252        146          1        252 0   0 0   0 0   0 0   0       291
.....
  137 611170   3    ) = S, T=(U=V(1)          1          0        252        146          1 0   0 0   0 0   0 0   0       309
  138 032   0   3    ) = S, T=(U=V(1)          0        252        146          1        252 0   0 0   0 0   0 0   0       310
 IDENTIFIER TABLE ENTRY FOR V      SET TO TYPE 1, SIZE   1, LOCATION 251.
  139 102142   3    ) = S, T=(U=V(1)          0        252        146          1        252 0   0 0   0 0   0 0   0       311
.....
  146 300   0   3     = S, T=(U=V(1))          0        252        146          1        252 0   0 0   0 0   0 0   0       317
  147 510151   2     = S, T=(U=V(1))          0        252        146          1        252 0   0 0   0 0   0 0   0       318
  151 611130   2     = S, T=(U=V(1))        252        146          1        252        146 0   0 0   0 0   0 0   0       319
  152 702   0   2     = S, T=(U=V(1))        146          1        252        146          1 0   0 0   0 0   0 0   0       320
.....
  148 100148   2     = S, T=(U=V(1))          1        252        146          1        253 0   0 0   0 0   0 0   0       322
  150 112142   1     = S, T=(U=V(1))          1        252        146          1        253 0   0 0   0 0   0 0   0       323
  151 611130   3     = S, T=(U=V(1))        252        146          1        253        146 0   0 0   0 0   0 0   0       324
  152 702   0   3     = S, T=(U=V(1))        146          1        253        146          0 0   0 0   0 0   0 0   0       325
.....
  148 100148   3     = S, T=(U=V(1))          1        253        146          0        240 0   0 0   0 0   0 0   0       327
  149 500130   2   = S, T=(U=V(1)),           1        253        146          0        240 0   0 0   0 0   0 0   0       328
.....
 IDENTIFIER TABLE ENTRY FOR W      SET TO TYPE 1, SIZE   1, LOCATION 252.
  150 112142   2   S, T=(U=V(1)),W)          1        253        146          0        240 0   0 0   0 0   0 0   0       340
.....
  147 510151   3   S, T=(U=V(1)),W)          0        240        120          5       3313 0   0 0   0 0   0 0   0       344
.....
  120 100148   3   S, T=(U=V(1)),W)          5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       347
  122 303   2   2   , T=(U=V(1)),W).         5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       348
  123 500   5   2   , T=(U=V(1)),W).         5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       349
    5 102149   2   , T=(U=V(1)),W).         5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       350
    6 001   0   3   , T=(U=V(1)),W).         5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       351
    7 611140   3   , T=(U=V(1)),W).         0          5  331327751467648       3313 0   0 0   0 0   0 0   0       352
    8 001   6   3   , T=(U=V(1)),W).         5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       353
    9 611120   3   , T=(U=V(1)),W).         6          5  331327751467648       3313 0   0 0   0 0   0 0   0       354
   10 100176   3   , T=(U=V(1)),W).         5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       355
*************** ALPHA (7) A(20) = B = C(10).                                                          *****           355
   12 100106   2                ALPHA         5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       356
   14 001   0   2                ALPHA         5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       357
   15 601105   2                ALPHA         0          5  331327751467648       3313 0   0 0   0 0   0 0   0       358
   16 101141   2                ALPHA         0          5  331327751467648       3313 0   0 0   0 0   0 0   0       359
   17 510  35   2                ALPHA         0          5  331327751467648       3313 0   0 0   0 0   0 0   0       360
   35 403  36   2                ALPHA         5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       361
  804 400  77   2                ALPHA        36          5  331327751467648       3313 0   0 0   0 0   0 0   0       362
.....
   78 703   0   2                ALPHA       805         36          5  331327751467648 0   0 0   0 0   0 0   0       369
  806 101174   2                ALPHA        36          5  331327751467648       3313 0   0 0   0 0   0 0   0       370
  807 703   0   2                ALPHA        36          5  331327751467648       3313 0   0 0   0 0   0 0   0       371
   37 001   0   2                ALPHA         5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       372
   38 100173   2                ALPHA         0          5  331327751467648       3313 0   0 0   0 0   0 0   0       373
   40 101200   2                ALPHA         0          5  331327751467648       3313 0   0 0   0 0   0 0   0       374
   41 600160   2                ALPHA         0          5  331327751467648       3313 0   0 0   0 0   0 0   0       375
   42 203  25   2                ALPHA         2          0          5  331327751467648 0   0 0   0 0   0 0   0       376
   43 710   0   2                ALPHA         2          0          5  331327751467648 0   0 0   0 0   0 0   0       377
   44 102   2   2                ALPHA         2          0          5  331327751467648 0   0 0   0 0   0 0   0       378
   45 700   0   2                ALPHA         2          0          5  331327751467648 0   0 0   0 0   0 0   0       379
   46 500  49   2                ALPHA         0          5  331327751467648       3313 0   0 0   0 0   0 0   0       380
   49 510  86   1                ALPHA         0          5  331327751467648       3313 0   0 0   0 0   0 0   0       381
   86 102174   1                ALPHA         5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       382
   87 420  77   1              ALPHA (         5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       383
.....
   88 102142   1           ALPHA (7)          7          5  331327751467648       3313 0   0 0   0 0   0 0   0       401
   89 710   0   1           ALPHA (7)          7          5  331327751467648       3313 0   0 0   0 0   0 0   0       402
   90 002   7   1           ALPHA (7)          7          5  331327751467648       3313 0   0 0   0 0   0 0   0       403
   91 042   1   1           ALPHA (7)         14          5  331327751467648       3313 0   0 0   0 0   0 0   0       404
   92 612   0   1           ALPHA (7)          0          5  331327751467648       3313 0   0 0   0 0   0 0   0       405
   93 001   2   1           ALPHA (7)          1          5  331327751467648       3313 0   0 0   0 0   0 0   0       406
   94 620   0   1           ALPHA (7)          2          1          5  331327751467648 0   0 0   0 0   0 0   0       407
   95 311   1   1           ALPHA (7)          1          2          1          5       3313 0   0 0   0 0   0 0   0       408
   97 611120   1           ALPHA (7)          2          1          5  331327751467648 0   0 0   0 0   0 0   0       409
   98 500101   1           ALPHA (7)          1          5  331327751467648       3313 0   0 0   0 0   0 0   0       410
  101 611140   2           ALPHA (7)          1          5  331327751467648       3313 0   0 0   0 0   0 0   0       411
.....
 IDENTIFIER TABLE ENTRY FOR A      SET TO TYPE 2, SIZE   1, LOCATION 240.
  106 600120   2        ALPHA (7) A(          5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       415
  107 313   3   2        ALPHA (7) A(          2          5  331327751467648       3313 0   0 0   0 0   0 0   0       416
  108 420  77   2        ALPHA (7) A(          5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       417
.....
  109 611170   2    ALPHA (7) A(20)          20          5  331327751467648       3313 0   0 0   0 0   0 0   0       449
  110 102142   2    ALPHA (7) A(20)           5  331327751467648  331331708947200   0 0   0 0   0 0   0 0   0       450
.....
 IDENTIFIER TABLE ENTRY FOR A      SET TO TYPE 2, SIZE  20, LOCATION 221.
```

```
  119 400124  2   LPHA (7) A(20) =          5      33132751467648      33133170894720 0   0 0   0 0   0 0   0      459
....
IDENTIFIER TABLE ENTRY FOR B      SET TO TYPE 2, SIZE   1, LOCATION 221.
IDENTIFIER TABLE ENTRY FOR C      SET TO TYPE 2, SIZE   1, LOCATION 221.
IDENTIFIER TABLE ENTRY FOR C      SET TO TYPE 2, SIZE  10, LOCATION 221.
  122 303   2   3    20) = B = C(10).          5      33132751467648      33133170894720 0   0 0   0 0   0 0   0      534
  123 500   5   3    20) = B = C(10).          5      33132751467648      33133170894720 0   0 0   0 0   0 0   0      535
    5 102149  3   3    20) = B = C(10).          5      33132751467648      33133170894720 0   0 0   0 0   0 0   0      536
.....
**************** ALPHA(24) CCCCCCDD, D=E=(F=G=GG=(H)).                                                  *****          541
   12 100106  3                ALPHA          5      33132751467648      33133170894720 0   0 0   0 0   0 0   0      542
   14 001   0 3                ALPHA          5      33132751467648      33133170894720 0   0 0   0 0   0 0   0      543
   15 601105  3                ALPHA          0         5      331327514676483313 0   0 0   0 0   0 0   0      544
   16 101141  3                ALPHA          0         5      331327514676483313 0   0 0   0 0   0 0   0      545
   17 510  35 3                ALPHA          0         5      331327514676483313 0   0 0   0 0   0 0   0      546
   35 403  36 3                ALPHA          5      33132751467648      33133170894720 0   0 0   0 0   0 0   0      547
  804 400  77 3                ALPHA         36         5      331327514676483313 0   0 0   0 0   0 0   0      548
.....
   78 703   0 3                ALPHA        805        36         5      33132751467648 0   0 0   0 0   0 0   0      555
  806 101174 3                ALPHA         36         5      331327514676483313 0   0 0   0 0   0 0   0      556
  807 703   0 3                ALPHA         36         5      331327514676483313 0   0 0   0 0   0 0   0      557
   37 001   0 3                ALPHA          5      33132751467648      33133170894720 0   0 0   0 0   0 0   0      558
   38 100173  3                ALPHA          0         5      331327514676483313 0   0 0   0 0   0 0   0      559
   40 101200  3                ALPHA          0         5      331327514676483313 0   0 0   0 0   0 0   0      560
   41 600160  3                ALPHA          0         5      331327514676483313 0   0 0   0 0   0 0   0      561
   42 203  25 3                ALPHA          2         0         5      33132751467648 0   0 0   0 0   0 0   0      562
   43 710   0 3                ALPHA          2         0         5      33132751467648 0   0 0   0 0   0 0   0      563
   44 102   2 3                ALPHA          2         0         5      33132751467648 0   0 0   0 0   0 0   0      564
   45 700   0 3                ALPHA          2         0         5      33132751467648 0   0 0   0 0   0 0   0      565
   46 500  49 3                ALPHA          0         5      331327514676483313 0   0 0   0 0   0 0   0      566
   49 510  86 2                ALPHA          0         5      331327514676483313 0   0 0   0 0   0 0   0      567
   86 102174  2                ALPHA          5      33132751467648      33133170894720 0   0 0   0 0   0 0   0      568
   87 420  77 2               ALPHA(          5      33132751467648      33133170894720 0   0 0   0 0   0 0   0      569
.....
   88 102142  2          ALPHA(24)           24         5      331327514676483313 0   0 0   0 0   0 0   0      601
   89 710   0 2          ALPHA(24)           24         5      331327514676483313 0   0 0   0 0   0 0   0      602
   90 002  24 2          ALPHA(24)           24         5      331327514676483313 0   0 0   0 0   0 0   0      603
   91 042   1 2          ALPHA(24)           48         5      331327514676483313 0   0 0   0 0   0 0   0      604
   92 612   0 2          ALPHA(24)            3         5      331327514676483313 0   0 0   0 0   0 0   0      605
   93 001   2 2          ALPHA(24)            4         5      331327514676483313 0   0 0   0 0   0 0   0      606
   94 620   0 2          ALPHA(24)            2         4         5      33132751467648 0   0 0   0 0   0 0   0      607
   95 311   1 2          ALPHA(24)            4         2         4      3313 0   0 0   0 0   0 0   0      608
   96 002   1 1          ALPHA(24)            2         4         5      33132751467648 0   0 0   0 0   0 0   0      609
   97 611120  2          ALPHA(24)            3         4         5      33132751467648 0   0 0   0 0   0 0   0      610
   98 500101  2          ALPHA(24)            4         5      331327514676483313 0   0 0   0 0   0 0   0      611
  101 611140  3          ALPHA(24)            4         5      331327514676483313 0   0 0   0 0   0 0   0      612
.....
IDENTIFIER TABLE ENTRY FOR CCCCCC SET TO TYPE 3, SIZE   4, LOCATION 220.
  105 500111  3   HA(24) CCCCCCDD,          5      33132751467648      33133170894720 0   0 0   0 0   0 0   0      616
.....
IDENTIFIER TABLE ENTRY FOR CCCCCC SET TO TYPE 3, SIZE   4, LOCATION 217.
  121 500102  3   HA(24) CCCCCCDD,          5      33132751467648      33133170894720 0   0 0   0 0   0 0   0      626
.....
IDENTIFIER TABLE ENTRY FOR D      SET TO TYPE 3, SIZE   4, LOCATION 216.
IDENTIFIER TABLE ENTRY FOR D      SET TO TYPE 3, SIZE   4, LOCATION 213.
  119 400124  3   24) CCCCCCDD, D=          5      33132751467648      33133170894720 0   0 0   0 0   0 0   0      639
.....
IDENTIFIER TABLE ENTRY FOR E      SET TO TYPE 3, SIZE   4, LOCATION 213.
  129 002   1 3    CCCCCCDD, D=E=(          0        217       146            0       212 0   0 0   0 0   0 0   0      660
.....
IDENTIFIER TABLE ENTRY FOR F      SET TO TYPE 3, SIZE   4, LOCATION 213.
IDENTIFIER TABLE ENTRY FOR G      SET TO TYPE 3, SIZE   4, LOCATION 213.
IDENTIFIER TABLE ENTRY FOR GG     SET TO TYPE 3, SIZE   4, LOCATION 213.
IDENTIFIER TABLE ENTRY FOR H      SET TO TYPE 3, SIZE   4, LOCATION 213.
  150 112142  3    D=E=(F=G=GG=(H)          1        217       146            0       217 0   0 0   0 0   0 0   0      718
.....
**************** BEGIN ROUTINE PP(X,Y,Z,L,M,N).                                                         *****          746
   51 512221  1                BEGIN          0         5      331327514676483313 0   0 0   0 0   0 0   0      772
  733 101  55 1                BEGIN          5      33132751467648      33133170894720 0   0 0   0 0   0 0   0      773
  735 600110  1       BEGIN ROUTINE          5      33132751467648      33133170894720 0   0 0   0 0   0 0   0      774
  736 001   1 1       BEGIN ROUTINE       1024         5      331327514676483313 0   0 0   0 0   0 0   0      775
  737 701   0 1       BEGIN ROUTINE          1      1024         5      33132751467648 0   0 0   0 0   0 0   0      776
                                                                  01100110
                                                                  00000000
                                                                  00000001
                                                                  00000000
        COMPILE   0.1:   STOP     1
  738 001   4 1       BEGIN ROUTINE          1      1024         5      33132751467648 0   0 0   0 0   0 0   0      777
  739 611120  1       BEGIN ROUTINE          4         1      1024         5      3313 0   0 0   0 0   0 0   0      778
  740 001  32 1       BEGIN ROUTINE          1      1024         5      33132751467648 0   0 0   0 0   0 0   0      779
  741 012   2 1       BEGIN ROUTINE         32         1      1024         5      3313 0   0 0   0 0   0 0   0      780
```

```
742 600110  1       BEGIN ROUTINE          8192          1          1024          5       3313 0   0 0   0 0   0 0   0       781
743 011   0 1       BEGIN ROUTINE          2048       8192             1       1024          5 0   0 0   0 0   0 0   0       782
744 402  46 1       BEGIN ROUTINE         10240          1          1024          5       3313 0   0 0   0 0   0 0   0       783
558 600130  1       BEGIN ROUTINE           745      10240             1       1024          5 0   0 0   0 0   0 0   0       784
559 003   1 1       BEGIN ROUTINE           212        745         10240             1       1024 0   0 0   0 0   0 0   0       785
560 601130  1       BEGIN ROUTINE           211        745         10240             1       1024 0   0 0   0 0   0 0   0       786
561 002   1 1       BEGIN ROUTINE           211        745         10240             1       1024 0   0 0   0 0   0 0   0       787
562 013161  1       BEGIN ROUTINE           212        745         10240             1       1024 0   0 0   0 0   0 0   0       788
                                                                                  01010111
                                                                                  10100001
563 041  10 1       BEGIN ROUTINE           212        745         10240             1       1024 0   0 0   0 0   0 0   0       789
    COMPILE CONSTANT IN LOCATION 1.212          0 0 0 0 0 0 0 0 0 0 0 0 0 2 8 0 0
564 710   0 1       BEGIN ROUTINE           212        745         10240             1       1024 0   0 0   0 0   0 0   0       790
565 013212  1       BEGIN ROUTINE           212        745         10240             1       1024 0   0 0   0 0   0 0   0       791
                                                                                  11010100
566 633   0 1       BEGIN ROUTINE           212        745         10240             1       1024 0   0 0   0 0   0 0   0       792
567 611115  1       BEGIN ROUTINE         10240        745           212             1       1024 0   0 0   0 0   0 0   0       793
568 001   0 1       BEGIN ROUTINE           745        212             1          1024          5 0   0 0   0 0   0 0   0       794
569 600115  1       BEGIN ROUTINE             0        745           212             1       1024 0   0 0   0 0   0 0   0       795
570 710   0 1       BEGIN ROUTINE         10240          0           745           212             1 0   0 0   0 0   0 0   0       796
571 013   0 1       BEGIN ROUTINE         10240          0           745           212             1 0   0 0   0 0   0 0   0       797
                                                                                  00000000
572 042   2 1       BEGIN ROUTINE         10240          0           745           212             1 0   0 0   0 0   0 0   0       798
573 611115  1       BEGIN ROUTINE            40          0           745           212             1 0   0 0   0 0   0 0   0       799
574 002   1 1       BEGIN ROUTINE             0        745           212             1       1024 0   0 0   0 0   0 0   0       800
575 301   8 1       BEGIN ROUTINE             1        745           212             1       1024 0   0 0   0 0   0 0   0       801
576 502  57 1       BEGIN ROUTINE             1        745           212             1       1024 0   0 0   0 0   0 0   0       802
569 600115  2       BEGIN ROUTINE             1        745           212             1       1024 0   0 0   0 0   0 0   0       803
570 710   0 2       BEGIN ROUTINE            40          1           745           212             1 0   0 0   0 0   0 0   0       804
571 013  40 2       BEGIN ROUTINE            40          1           745           212             1 0   0 0   0 0   0 0   0       805
                                                                                  00101000
572 042   2 2       BEGIN ROUTINE            40          1           745           212             1 0   0 0   0 0   0 0   0       806
573 611115  2       BEGIN ROUTINE             0          1           745           212             1 0   0 0   0 0   0 0   0       807
574 002   1 2       BEGIN ROUTINE             1        745           212             1       1024 0   0 0   0 0   0 0   0       808
575 301   8 2       BEGIN ROUTINE             2        745           212             1       1024 0   0 0   0 0   0 0   0       809
576 502  57 2       BEGIN ROUTINE             2        745           212             1       1024 0   0 0   0 0   0 0   0       810
569 600115  3       BEGIN ROUTINE             2        745           212             1       1024 0   0 0   0 0   0 0   0       811
570 710   0 3       BEGIN ROUTINE             0          2           745           212             1 0   0 0   0 0   0 0   0       812
571 013   0 3       BEGIN ROUTINE             0          2           745           212             1 0   0 0   0 0   0 0   0       813
                                                                                  00000000
572 042   2 3       BEGIN ROUTINE             0          2           745           212             1 0   0 0   0 0   0 0   0       814
573 611115  3       BEGIN ROUTINE             0          2           745           212             1 0   0 0   0 0   0 0   0       815
574 002   1 3       BEGIN ROUTINE             2        745           212             1       1024 0   0 0   0 0   0 0   0       816
575 301   8 3       BEGIN ROUTINE             3        745           212             1       1024 0   0 0   0 0   0 0   0       817
576 502  57 3       BEGIN ROUTINE             3        745           212             1       1024 0   0 0   0 0   0 0   0       818
.....
                                                                                  00000000
                                                                                  00000000
                                                                                  00000000
                                                                                  00000000
                                                                                  00000000
577 512  39 1       BEGIN ROUTINE             8        745           212             1       1024 0   0 0   0 0   0 0   0       858
551 700100  1       BEGIN ROUTINE           745        212             1          1024          5 0   0 0   0 0   0 0   0       859
552 013  82 1       BEGIN ROUTINE           745        212             1          1024          5 0   0 0   0 0   0 0   0       860
                                                                                  01010010
553 001   0 1       BEGIN ROUTINE           745        212             1          1024          5 0   0 0   0 0   0 0   0       861
554 611100  1       BEGIN ROUTINE             0        745           212             1       1024 0   0 0   0 0   0 0   0       862
555 702   0 1       BEGIN ROUTINE           745        212             1          1024          5 0   0 0   0 0   0 0   0       863
745 602130  1       BEGIN ROUTINE           212          1          1024             5       3313 0   0 0   0 0   0 0   0       864
746 102104  1       BEGIN ROUTINE           212          1          1024             5       3313 0   0 0   0 0   0 0   0       865
IDENTIFIER TABLE ENTRY FOR PP      SET TO TYPE 4, SIZE    0, LOCATION 212.
747 101174  1    BEGIN ROUTINE PP           212          1          1024             5       3313 0   0 0   0 0   0 0   0       866
749 001   5 1    EGIN ROUTINE PP(           212          1          1024             5       3313 0   0 0   0 0   0 0   0       867
750 611120  1    EGIN ROUTINE PP(             5        212             1          1024          5 0   0 0   0 0   0 0   0       868
751 102105  1    EGIN ROUTINE PP(           212          1          1024             5       3313 0   0 0   0 0   0 0   0       869
IDENTIFIER TABLE ENTRY FOR X       SET TO TYPE 5, SIZE    0, LOCATION 211.
752 003   1 1    GIN ROUTINE PP(X           212          1          1024             5       3313 0   0 0   0 0   0 0   0       870
753 700180  1    GIN ROUTINE PP(X           211          1          1024             5       3313 0   0 0   0 0   0 0   0       871
754 302211  1    GIN ROUTINE PP(X           211          1          1024             5       3313 0   0 0   0 0   0 0   0       872
755 100148  1    GIN ROUTINE PP(X           211          1          1024             5       3313 0   0 0   0 0   0 0   0       873
756 502239  1    IN ROUTINE PP(X,           211          1          1024             5       3313 0   0 0   0 0   0 0   0       874
751 102105  2    IN ROUTINE PP(X,           211          1          1024             5       3313 0   0 0   0 0   0 0   0       875
IDENTIFIER TABLE ENTRY FOR Y       SET TO TYPE 5, SIZE    0, LOCATION 210.
752 003   1 2    N ROUTINE PP(X,Y           211          1          1024             5       3313 0   0 0   0 0   0 0   0       876
753 700180  2    N ROUTINE PP(X,Y           210          1          1024             5       3313 0   0 0   0 0   0 0   0       877
754 302210  2    N ROUTINE PP(X,Y           210          1          1024             5       3313 0   0 0   0 0   0 0   0       878
755 100148  2    N ROUTINE PP(X,Y           210          1          1024             5       3313 0   0 0   0 0   0 0   0       879
756 502239  2     ROUTINE PP(X,Y,           210          1          1024             5       3313 0   0 0   0 0   0 0   0       880
751 102105  3     ROUTINE PP(X,Y,           210          1          1024             5       3313 0   0 0   0 0   0 0   0       881
IDENTIFIER TABLE ENTRY FOR Z       SET TO TYPE 5, SIZE    0, LOCATION 209.
752 003   1 3    ROUTINE PP(X,Y,Z           210          1          1024             5       3313 0   0 0   0 0   0 0   0       882
```

```
  753 700180   3    ROUTINE PP(X,Y,Z          209          1        1024          5       3313 0   0 0   0 0   0 0   0       883
  754 302209   3    ROUTINE PP(X,Y,Z          209          1        1024          5       3313 0   0 0   0 0   0 0   0       884
  755 100148   3    ROUTINE PP(X,Y,Z          209          1        1024          5       3313 0   0 0   0 0   0 0   0       885
  756 502239   3    OUTINE PP(X,Y,Z,          209          1        1024          5       3313 0   0 0   0 0   0 0   0       886
.....
IDENTIFIER TABLE ENTRY FOR L        SET TO TYPE 5, SIZE    0, LOCATION 208.
IDENTIFIER TABLE ENTRY FOR M        SET TO TYPE 5, SIZE    0, LOCATION 207.
IDENTIFIER TABLE ENTRY FOR N        SET TO TYPE 5, SIZE    0, LOCATION 206.
  757 102142   1     PP(X,Y,Z,L,M,N)         206          1        1024          5       3313 0   0 0   0 0   0 0   0       904
  758 510122   1     PP(X,Y,Z,L,M,N)         206          1        1024          5       3313 0   0 0   0 0   0 0   0       905
.....
**************** BEGIN ROUTINE QQ.                                                                    *****                       913
   51 512221   2                BEGIN           0          1        1024          5       3313 0   0 0   0 0   0 0   0       939
  733 101 55   2                BEGIN           1       1024           5  3313275146764 8 0   0 0   0 0   0 0   0       940
  735 600110   2          BEGIN ROUTINE         1       1024           5  3313275146764 8 0   0 0   0 0   0 0   0       941
  736 001  1   2          BEGIN ROUTINE      2048          1        1024          5       3313 0   0 0   0 0   0 0   0       942
  737 701  0   2          BEGIN ROUTINE         1       2048           1       1024          5 0   0 0   0 0   0 0   0       943
                                                                  01101010
                                                                  00000000
                                                                  00000001
                                                                  00000000
       COMPILE    0.2:    STOP      1
  738 001  4   2          BEGIN ROUTINE         1       2048           1       1024          5 0   0 0   0 0   0 0   0       944
  739 611120   2          BEGIN ROUTINE         4          1        2048          1       1024 0   0 0   0 0   0 0   0       945
  740 001 32   2          BEGIN ROUTINE         1       2048           1       1024          5 0   0 0   0 0   0 0   0       946
  741 012  2   2          BEGIN ROUTINE        32          1        2048          1       1024 0   0 0   0 0   0 0   0       947
  742 600110   2          BEGIN ROUTINE      8192          1        2048          1       1024 0   0 0   0 0   0 0   0       948
  743 011  0   2          BEGIN ROUTINE      3072       8192           1       2048          1 0   0 0   0 0   0 0   0       949
  744 402 46   2          BEGIN ROUTINE     11264          1        2048          1       1024 0   0 0   0 0   0 0   0       950
  558 600130   2          BEGIN ROUTINE       745      11264           1       2048          1 0   0 0   0 0   0 0   0       951
  559 003  1   2          BEGIN ROUTINE       205        745       11264          1       2048 0   0 0   0 0   0 0   0       952
  560 601130   2          BEGIN ROUTINE       204        745       11264          1       2048 0   0 0   0 0   0 0   0       953
  561 002  1   2          BEGIN ROUTINE       204        745       11264          1       2048 0   0 0   0 0   0 0   0       954
  562 013161   2          BEGIN ROUTINE       205        745       11264          1       2048 0   0 0   0 0   0 0   0       955
                                                                  01011011
                                                                  10100001
  563 041 10   2          BEGIN ROUTINE       205        745       11264          1       2048 0   0 0   0 0   0 0   0       956
       COMPILE CONSTANT IN LOCATION 1.205      0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  2 12  0  0
  564 710  0   2          BEGIN ROUTINE       205        745       11264          1       2048 0   0 0   0 0   0 0   0       957
  565 013205   2          BEGIN ROUTINE       205        745       11264          1       2048 0   0 0   0 0   0 0   0       958
                                                                  11001101
  566 633  0   2          BEGIN ROUTINE       205        745       11264          1       2048 0   0 0   0 0   0 0   0       959
  567 611115   2          BEGIN ROUTINE     11264        745         205          1       2048 0   0 0   0 0   0 0   0       960
  568 001  0   2          BEGIN ROUTINE       745        205           1       2048          1 0   0 0   0 0   0 0   0       961
.....
                                                                  00000000
                                                                  00101100
                                                                  00000000
                                                                  00000000
                                                                  00000000
                                                                  00000000
                                                                  00000000
                                                                  00000000
  577 512 39   2          BEGIN ROUTINE         8        745         205          1       2048 0   0 0   0 0   0 0   0      1025
  551 700100   2          BEGIN ROUTINE       745        205           1       2048          1 0   0 0   0 0   0 0   0      1026
  552 013 94   2          BEGIN ROUTINE       745        205           1       2048          1 0   0 0   0 0   0 0   0      1027
                                                                  01011110
  553 001  0   2          BEGIN ROUTINE       745        205           1       2048          1 0   0 0   0 0   0 0   0      1028
  554 611100   2          BEGIN ROUTINE         0        745         205          1       2048 0   0 0   0 0   0 0   0      1029
  555 702  0   2          BEGIN ROUTINE       745        205           1       2048          1 0   0 0   0 0   0 0   0      1030
  745 602130   2          BEGIN ROUTINE       205          1        2048          1       1024 0   0 0   0 0   0 0   0      1031
  746 102104   2          BEGIN ROUTINE       205          1        2048          1       1024 0   0 0   0 0   0 0   0      1032
IDENTIFIER TABLE ENTRY FOR QQ       SET TO TYPE 4, SIZE    0, LOCATION 205.
  747 101174   2    BEGIN ROUTINE QQ          205          1        2048          1       1024 0   0 0   0 0   0 0   0      1033
  748 510122   1    EGIN ROUTINE QQ.          205          1        2048          1       1024 0   0 0   0 0   0 0   0      1034
.....
**************** 100 KEY ROUTINE A7:L1, B7:L2.                                                        *****                       1042
  805 503 46   1               100 KEY        100         36           1       2048          1 0   0 0   0 0   0 0   0      1094
  814 711251   1               100 KEY        100         36           1       2048          1 0   0 0   0 0   0 0   0      1095
                                                                  01101110
                                                                  00000000
                                                                  01100100
                                                                  11111011
       COMPILE    0.3:    LPOSR  100
  815 702  0   1               100 KEY         36          1        2048          1       1024 0   0 0   0 0   0 0   0      1096
   36 500 14   1               100 KEY          1       2048           1       1024          5 0   0 0   0 0   0 0   0      1097
.....
   59 512112   1               100 KEY          0          1        2048          1       1024 0   0 0   0 0   0 0   0      1122
  624 600110   1               100 KEY          1       2048           1       1024          5 0   0 0   0 0   0 0   0      1123
  625 710  0   1               100 KEY          1          1        2048          1       1024 0   0 0   0 0   0 0   0      1124
  626 001  6   1               100 KEY          1          1        2048          1       1024 0   0 0   0 0   0 0   0      1125
```

```
627 711 32  1                100 KEY          6          1          1          2048          1 0   0 0   0 0   0 0   0     1126
                                                                  11101000
                                                                  00000110
                                                                  00100000

      COMPILE    1.0:   BRU00      6
628 042  1  1                   100 KEY          1          1          2048          1     1024 0   0 0   0 0   0 0   0     1127
629 200192  1                   100 KEY          0          1          2048          1     1024 0   0 0   0 0   0 0   0     1128
631 002 64  1                   100 KEY          0          1          2048          1     1024 0   0 0   0 0   0 0   0     1129
632 701  0  1                   100 KEY         64          1          2048          1     1024 0   0 0   0 0   0 0   0     1130
                                                                  11100100
                                                                  01000000
                                                                  00000000

      COMPILE    1.1:   STOP     64
633 502117  1                   100 KEY         64          1          2048          1     1024 0   0 0   0 0   0 0   0     1131
629 200192  2                   100 KEY         64          1          2048          1     1024 0   0 0   0 0   0 0   0     1132
631 002 64  2                   100 KEY         64          1          2048          1     1024 0   0 0   0 0   0 0   0     1133
632 701  0  2                   100 KEY        128          1          2048          1     1024 0   0 0   0 0   0 0   0     1134
                                                                  11100100
                                                                  10000000
                                                                  00000000

      COMPILE    1.2:   STOP    128    BY
633 502117  2                   100 KEY        128          1          2048          1     1024 0   0 0   0 0   0 0   0     1135
629 200192  3                   100 KEY        128          1          2048          1     1024 0   0 0   0 0   0 0   0     1136
631 002 64  3                   100 KEY        128          1          2048          1     1024 0   0 0   0 0   0 0   0     1137
632 701  0  3                   100 KEY        192          1          2048          1     1024 0   0 0   0 0   0 0   0     1138
                                                                  11101000
                                                                  11000000
                                                                  00000000

      COMPILE    1.3:   STOP    192
633 502117  3                   100 KEY        192          1          2048          1     1024 0   0 0   0 0   0 0   0     1139
..:::
630 512122  1                   100 KEY        192          1          2048          1     1024 0   0 0   0 0   0 0   0     1141
634 600110  1                   100 KEY          1       2048             1       1024        5 0   0 0   0 0   0 0   0     1142
635 102 55  1                   100 KEY          2          1          2048          1     1024 0   0 0   0 0   0 0   0     1143
636 001  0  1     100 KEY ROUTINE              2          1          2048          1     1024 0   0 0   0 0   0 0   0     1144
637 422102  1     100 KEY ROUTINE              0          2             1       2048           1 0   0 0   0 0   0 0   0     1145
614 001  3  1     100 KEY ROUTINE            638          0             2          1       2048 0   0 0   0 0   0 0   0     1146
615 601150  1     100 KEY ROUTINE              3        638             0          2          1 0   0 0   0 0   0 0   0     1147
616 100177  1     100 KEY ROUTINE              3        638             0          2          1 0   0 0   0 0   0 0   0     1148
617 502108  1  00 KEY ROUTINE A               3        638             0          2          1 0   0 0   0 0   0 0   0     1149
620 003  3  1  00 KEY ROUTINE A               3        638             0          2          1 0   0 0   0 0   0 0   0     1150
621 420 68  1  00 KEY ROUTINE A               0        638             0          2          1 0   0 0   0 0   0 0   0     1151
..:::
622 011  0  1   0 KEY ROUTINE A7              7          0           638          0            2 0   0 0   0 0   0 0   0     1160
623 712  0  1   0 KEY ROUTINE A7              7        638             0          2          1 0   0 0   0 0   0 0   0     1161
638 102158  1   0 KEY ROUTINE A7              7          0             2          1       2048 0   0 0   0 0   0 0   0     1162
639 720  0  1    KEY ROUTINE A7:              7          0             2          1       2048 0   0 0   0 0   0 0   0     1163
640 300  0  1    KEY ROUTINE A7:              7          0             2          1       2048 0   0 0   0 0   0 0   0     1164
642 701211  1    KEY ROUTINE A7:              7          0             2          1       2048 0   0 0   0 0   0 0   0     1165
                                                                  11101100
                                                                  00000111
                                                                  11010011

      COMPILE    2.0:   NOP      7
643 502135  1    KEY ROUTINE A7:              7          0             2          1       2048 0   0 0   0 0   0 0   0     1166
647 622  0  1    KEY ROUTINE A7:              7          0             2          1       2048 0   0 0   0 0   0 0   0     1167
648 620  0  1    KEY ROUTINE A7:              7          1             2          1       2048 0   0 0   0 0   0 0   0     1168
649 310 16  1    KEY ROUTINE A7:              1          7             1          2          1 0   0 0   0 0   0 0   0     1169
651 720  0  1    KEY ROUTINE A7:              7          1             2          1       2048 0   0 0   0 0   0 0   0     1170
652 301  0  1    KEY ROUTINE A7:              7          1             2          1       2048 0   0 0   0 0   0 0   0     1171
653 502127  1    KEY ROUTINE A7:              7          1             2          1       2048 0   0 0   0 0   0 0   0     1172
639 720  0  2    KEY ROUTINE A7:              7          1             2          1       2048 0   0 0   0 0   0 0   0     1173
640 300  1  2    KEY ROUTINE A7:              7          1             2          1       2048 0   0 0   0 0   0 0   0     1174
642 701211  2    KEY ROUTINE A7:              7          1             2          1       2048 0   0 0   0 0   0 0   0     1175
                                                                  11101001
                                                                  00000111
                                                                  11010011

      COMPILE    2.1:   NOP      7
643 502135  2    KEY ROUTINE A7:              7          1             2          1       2048 0   0 0   0 0   0 0   0     1176
647 622  0  2    KEY ROUTINE A7:              7          1             2          1       2048 0   0 0   0 0   0 0   0     1177
648 620  0  2    KEY ROUTINE A7:              7          2             2          1       2048 0   0 0   0 0   0 0   0     1178
649 310 16  2    KEY ROUTINE A7:              2          7             2          2          1 0   0 0   0 0   0 0   0     1179
651 720  0  2    KEY ROUTINE A7:              7          2             2          1       2048 0   0 0   0 0   0 0   0     1180
652 301  1  2    KEY ROUTINE A7:              7          2             2          1       2048 0   0 0   0 0   0 0   0     1181
653 502127  2    KEY ROUTINE A7:              7          2             2          1       2048 0   0 0   0 0   0 0   0     1182
639 720  0  3    KEY ROUTINE A7:              7          2             2          1       2048 0   0 0   0 0   0 0   0     1183
640 300  2  3    KEY ROUTINE A7:              7          2             2          1       2048 0   0 0   0 0   0 0   0     1184
642 701211  3    KEY ROUTINE A7:              7          2             2          1       2048 0   0 0   0 0   0 0   0     1185
                                                                  11101001
                                                                  00000111
                                                                  11010011

      COMPILE    2.2:   NOP      7
```

```
  643 502135   3     KEY ROUTINE A7:          7          2          2          1     2048 0    0 0    0 0    0 0    0     1186
  647 622   0  3     KEY ROUTINE A7:          7          2          2          1     2048 0    0 0    0 0    0 0    0     1187
  648 620   0  3     KEY ROUTINE A7:          7          3          2          1     2048 0    0 0    0 0    0 0    0     1188
  649 310  16  3     KEY ROUTINE A7:          3          7          3          2        1 0    0 0    0 0    0 0    0     1189
  651 720   0  3     KEY ROUTINE A7:          7          3          2          1     2048 0    0 0    0 0    0 0    0     1190
  652 301   2  3     KEY ROUTINE A7:          7          3          2          1     2048 0    0 0    0 0    0 0    0     1191
  653 502127   3     KEY ROUTINE A7:          7          3          2          1     2048 0    0 0    0 0    0 0    0     1192
.....
                                                                  11101001
                                                                  00000111
                                                                  11010011

        COMPILE   2.3:   NOP      7

                                                                  11101001
                                                                  00000111
                                                                  11010011

        COMPILE   3.0:   NOP      7

                                                                  11101001
                                                                  00000111
                                                                  11010011

        COMPILE   3.1:   NOP      7

                                                                  11101001
                                                                  00000111
                                                                  11010011

        COMPILE   3.2:   NOP      7
  641 502132   1     KEY ROUTINE A7:          7          7          2          1     2048 0    0 0    0 0    0 0    0     1235
  644 102106   1     KEY ROUTINE A7:          7          7          2          1     2048 0    0 0    0 0    0 0    0     1236
IDENTIFIER TABLE ENTRY FOR L1      SET TO TYPE 6, SIZE   0, LOCATION 204.
  645 600180   1     EY ROUTINE A7:L1         7          7          2          1     2048 0    0 0    0 0    0 0    0     1237
  646 711  33  1     EY ROUTINE A7:L1       204          7          7          2        1 0    0 0    0 0    0 0    0     1238
                                                                  11101001
                                                                  11001100
                                                                  00100001

        COMPILE   3.3:   BRU01  204   L1
.....
  654 100148   1     EY ROUTINE A7:L1         7          8          2          1     2048 0    0 0    0 0    0 0    0     1244
  655 512125   1     Y ROUTINE A7:L1,         7          8          2          1     2048 0    0 0    0 0    0 0    0     1245
  637 422102   2     Y ROUTINE A7:L1,         8          2          1       2048        1 0    0 0    0 0    0 0    0     1246
  614 001   3  2     Y ROUTINE A7:L1,       638          8          2          1     2048 0    0 0    0 0    0 0    0     1247
  615 601150   2     Y ROUTINE A7:L1,         3        638          8          2        1 0    0 0    0 0    0 0    0     1248
  616 100177   2     Y ROUTINE A7:L1,         3        638          8          2        1 0    0 0    0 0    0 0    0     1249
  618 112178   1     ROUTINE A7:L1, B         3        638          8          2        1 0    0 0    0 0    0 0    0     1250
  619 001  11  1     ROUTINE A7:L1, B       638          8          2          1     2048 0    0 0    0 0    0 0    0     1251
  620 003   3  2     ROUTINE A7:L1, B        11        638          8          2        1 0    0 0    0 0    0 0    0     1252
  621 420  68  2     ROUTINE A7:L1, B         8        638          8          2        1 0    0 0    0 0    0 0    0     1253
.....
  622 011   0  2     OUTINE A7:L1, B7         7          8        638          8        2 0    0 0    0 0    0 0    0     1262
  623 712   0  2     OUTINE A7:L1, B7        15        638          8          2        1 0    0 0    0 0    0 0    0     1263
  638 102158   2     OUTINE A7:L1, B7        15          8          2          1     2048 0    0 0    0 0    0 0    0     1264
.....
                                                                  11100011
                                                                  00001111
                                                                  11010011

        COMPILE   4.0:   NOP      15

                                                                  11100001
                                                                  00001111
                                                                  11010011

        COMPILE   4.1:   NOP      15

                                                                  11100001
                                                                  00001111
                                                                  11010011

        COMPILE   4.2:   NOP      15

                                                                  11100001
                                                                  00001111
                                                                  11010011

        COMPILE   4.3:   NOP      15

                                                                  11100001
                                                                  00001111
                                                                  11010011

        COMPILE   5.0:   NOP      15

                                                                  11100001
                                                                  00001111
                                                                  11010011

        COMPILE   5.1:   NOP      15

                                                                  11100001
                                                                  00001111
                                                                  11010011

        COMPILE   5.2:   NOP      15
  641 502132   2     UTINE A7:L1, B7:        15         15          2          1     2048 0    0 0    0 0    0 0    0     1337
  644 102106   2     UTINE A7:L1, B7:        15         15          2          1     2048 0    0 0    0 0    0 0    0     1338
IDENTIFIER TABLE ENTRY FOR L2      SET TO TYPE 6, SIZE   0, LOCATION 203.
  645 600180   2     INE A7:L1, B7:L2        15         15          2          1     2048 0    0 0    0 0    0 0    0     1339
```

```
  646 711 33  2    INE A7:L1, B7:L2          203          15          15          2          1 0   0 0   0 0   0 0   0      1340
                                                                    11100001
                                                                    11001011
                                                                    00100001

        COMPILE   5.3:   BRU01  203   L2
.....
  650 502146  1    INE A7:L1, B7:L2           15          16           2          1       2048 0   0 0   0 0   0 0   0      1344
  658 222 15  1    INE A7:L1, B7:L2           15          16           2          1       2048 0   0 0   0 0   0 0   0      1345
  659 711196  1    INE A7:L1, B7:L2            2           1        2048          1       1024 0   0 0   0 0   0 0   0      1346
                                                                    11100100
                                                                    00000010
                                                                    11000100

        COMPILE   6.0:   LPKR0    2
  660 500   3  1    INE A7:L1, B7:L2           1        2048           1       1024          5 0   0 0   0 0   0 0   0      1347
    3 300   2  1    INE A7:L1, B7:L2           1        2048           1       1024          5 0   0 0   0 0   0 0   0      1348
.....
                                                                    01011010
**************** END ROUTINE QQ.                                                                          *****                1354
   55 512247  1                  END           0           1        2048          1       1024 0   0 0   0 0   0 0   0      1380
  759 101  55  1                  END           1        2048           1       1024          5 0   0 0   0 0   0 0   0      1381
  761 001   0  1          END ROUTINE           1        2048           1       1024          5 0   0 0   0 0   0 0   0      1382
  762 711139  1          END ROUTINE           0           1        2048          1       1024 0   0 0   0 0   0 0   0      1383
                                                                    01100110
                                                                    00000110
                                                                    00000000
                                                                    10001011

        COMPILE   6.1:   SRR      0
  763 312   1  1          END ROUTINE           1        2048           1       1024          5 0   0 0   0 0   0 0   0      1384
  764 402  23  1          END ROUTINE        2048           1        1024          5       3313 0   0 0   0 0   0 0   0      1385
  535 401  85  1          END ROUTINE         765        2048           1       1024          5 0   0 0   0 0   0 0   0      1386
  341 001   0  2          END ROUTINE         536         765        2048          1       1024 0   0 0   0 0   0 0   0      1387
  342 601   2  2          END ROUTINE           0         536         765       2048             1 0   0 0   0 0   0 0   0      1388
  343 601   6  2          END ROUTINE           0         536         765       2048             1 0   0 0   0 0   0 0   0      1389
  344 601  10  2          END ROUTINE           0         536         765       2048             1 0   0 0   0 0   0 0   0      1390
  345 611  14  2          END ROUTINE           0         536         765       2048             1 0   0 0   0 0   0 0   0      1391
  346 702   0  2          END ROUTINE         536         765        2048          1       1024 0   0 0   0 0   0 0   0      1392
  536 623   0  1          END ROUTINE         765        2048           1       1024          5 0   0 0   0 0   0 0   0      1393
  537 042   2  1          END ROUTINE        2048         765           1       1024          5 0   0 0   0 0   0 0   0      1394
  538 002  96  1          END ROUTINE           8         765           1       1024          5 0   0 0   0 0   0 0   0      1395
  539 710   0  1          END ROUTINE         104         765           1       1024          5 0   0 0   0 0   0 0   0      1396
  540 013 104  1          END ROUTINE         104         765           1       1024          5 0   0 0   0 0   0 0   0      1397
                                                                    01010011
                                                                    01101000
  541 041   6  1          END ROUTINE         104         765           1       1024          5 0   0 0   0 0   0 0   0      1398
      FIXUP LOCATION  0.2
  542 012   2  1          END ROUTINE         104         765           1       1024          5 0   0 0   0 0   0 0   0      1399
  543 700   0  1          END ROUTINE       26624         765           1       1024          5 0   0 0   0 0   0 0   0      1400
  544 013   0  1          END ROUTINE         765           1        1024          5       3313 0   0 0   0 0   0 0   0      1401
                                                                    00000000
  545 600110  1          END ROUTINE         765           1        1024          5       3313 0   0 0   0 0   0 0   0      1402
  546 710   0  1          END ROUTINE        2054         765           1       1024          5 0   0 0   0 0   0 0   0      1403
  547 013   6  1          END ROUTINE        2054         765           1       1024          5 0   0 0   0 0   0 0   0      1404
                                                                    00000110
  548 042   2  1          END ROUTINE        2054         765           1       1024          5 0   0 0   0 0   0 0   0      1405
  549 700   0  1          END ROUTINE           8         765           1       1024          5 0   0 0   0 0   0 0   0      1406
  550 013  40  1          END ROUTINE         765           1        1024          5       3313 0   0 0   0 0   0 0   0      1407
                                                                    00101000
  551 700100  3          END ROUTINE         765           1        1024          5       3313 0   0 0   0 0   0 0   0      1408
  552 013  84  3          END ROUTINE         765           1        1024          5       3313 0   0 0   0 0   0 0   0      1409
                                                                    01010100
  553 001   0  3          END ROUTINE         765           1        1024          5       3313 0   0 0   0 0   0 0   0      1410
  554 611100  3          END ROUTINE           0         765           1       1024          5 0   0 0   0 0   0 0   0      1411
  555 702   0  3          END ROUTINE         765           1        1024          5       3313 0   0 0   0 0   0 0   0      1412
  765 001   1  2          END ROUTINE           1        1024           5  331327514676480   0 0   0 0   0 0   0 0   0      1413
  766 611150  2          END ROUTINE           1           1        1024          5       3313 0   0 0   0 0   0 0   0      1414
  767 500122  2          END ROUTINE           1        1024           5  331327514676480   0 0   0 0   0 0   0 0   0      1415
.....
**************** CALL QQ.   KEY ROUTINE A0:L2,A1:L1.                                                    IF*****                1423
   52 512 78  1                CALL           0           1        1024          5       3313 0   0 0   0 0   0 0   0      1449
  590 102104  1                CALL           1        1024           5  331327514676480   0 0   0 0   0 0   0 0   0      1450
  591 600180  1             CALL QQ           1        1024           5  331327514676480   0 0   0 0   0 0   0 0   0      1451
  592 601135  1             CALL QQ         205           1        1024          5       3313 0   0 0   0 0   0 0   0      1452
  593 101174  1             CALL QQ         205           1        1024          5       3313 0   0 0   0 0   0 0   0      1453
  594 502100  1           CALL QQ.          205           1        1024          5       3313 0   0 0   0 0   0 0   0      1454
  612 711129  1           CALL QQ.          205           1        1024          5       3313 0   0 0   0 0   0 0   0      1455
                                                                    01101010
                                                                    00000110
                                                                    11001101
                                                                    10000001

        COMPILE   6.2:   SRJ01  205   QQ
  613 500   3  1           CALL QQ.            1        1024           5  331327514676480   0 0   0 0   0 0   0 0   0      1456
```

```
    3 300  2  2              CALL QQ.          1        1024          5       33132751467648 0   0 0   0 0   0 0   0     1457
.....
   59 512112  2        CALL QQ.  KEY           0           1       1024             5      3313 0   0 0   0 0   0 0   0     1489
  624 600110  2        CALL QQ.  KEY           1        1024          5       33132751467648 0   0 0   0 0   0 0   0     1490
  625 710   0 2        CALL QQ.  KEY        3078           1       1024             5      3313 0   0 0   0 0   0 0   0     1491
  626 001  11 2        CALL QQ.  KEY        3078           1       1024             5      3313 0   0 0   0 0   0 0   0     1492
  627 711  32 2        CALL QQ.  KEY          11        3078          1       1024             5 0   0 0   0 0   0 0   0     1493
                                                                  11100100
                                                                  00001011
                                                                  00100000

        COMPILE   6.3:   BRU00   11
  628 042  1  2        CALL QQ.  KEY        3078           1       1024             5      3313 0   0 0   0 0   0 0   0     1494
.....
  630 512122  2        CALL QQ.  KEY         192           1       1024             5      3313 0   0 0   0 0   0 0   0     1496
  634 600110  2        CALL QQ.  KEY           1        1024          5       33132751467648 0   0 0   0 0   0 0   0     1497
  635 102  55 2        CALL QQ.  KEY           7           1       1024             5      3313 0   0 0   0 0   0 0   0     1498
  636 001   0 2  QQ.   KEY ROUTINE            7           1       1024             5      3313 0   0 0   0 0   0 0   0     1499
  637 422102  3  QQ.   KEY ROUTINE            0           7          1          1024          5 0   0 0   0 0   0 0   0     1500
  614 001   3 3  QQ.   KEY ROUTINE          638           0          7             1       1024 0   0 0   0 0   0 0   0     1501
  615 601150  3  QQ.   KEY ROUTINE            3         638          0             7          1 0   0 0   0 0   0 0   0     1502
  616 100177  3  QQ.   KEY ROUTINE            3         638          0             7          1 0   0 0   0 0   0 0   0     1503
  617 502108  2  .  KEY ROUTINE A            3         638          0             7          1 0   0 0   0 0   0 0   0     1504
  620 003   3 3  .  KEY ROUTINE A            3         638          0             7          1 0   0 0   0 0   0 0   0     1505
  621 420  68 3  .  KEY ROUTINE A            0         638          0             7          1 0   0 0   0 0   0 0   0     1506
.....
  622 011   0 3     KEY ROUTINE A0           0           0        638             0          7 0   0 0   0 0   0 0   0     1515
  623 712   0 3     KEY ROUTINE A0           0         638          0             7          1 0   0 0   0 0   0 0   0     1516
  638 102158  3     KEY ROUTINE A0           0           0          7             1       1024 0   0 0   0 0   0 0   0     1517
.....
  641 502132  3   KEY ROUTINE A0:            0           0          7             1       1024 0   0 0   0 0   0 0   0     1520
  644 102106  3   KEY ROUTINE A0:            0           0          7             1       1024 0   0 0   0 0   0 0   0     1521
  645 600180  3  EY ROUTINE A0:L2            0           0          7             1       1024 0   0 0   0 0   0 0   0     1522
  646 711  33 3  EY ROUTINE A0:L2          203           0          0             7          1 0   0 0   0 0   0 0   0     1523
                                                                  11101001
                                                                  11001011
                                                                  00100001

        COMPILE   7.0:   BRU01  203   L2
.....
  654 100148  2  EY ROUTINE A0:L2          0           1          7             1       1024 0   0 0   0 0   0 0   0     1529
  655 512125  2  Y ROUTINE A0:L2,          0           1          7             1       1024 0   0 0   0 0   0 0   0     1530
.....
  617 502108  3    ROUTINE A0:L2,A          3         638          1             7          1 0   0 0   0 0   0 0   0     1535
.....
                                                                  11100100
                                                                  11001100
                                                                  00100001

        COMPILE   7.1:   BRU01  204   L1
  654 100148  3  TINE A0:L2,A1:L1          1           2          7             1       1024 0   0 0   0 0   0 0   0     1560
  656 002200  1  INE A0:L2,A1:L1.          1           2          7             1       1024 0   0 0   0 0   0 0   0     1561
  657 502127  1  INE A0:L2,A1:L1.        201           2          7             1       1024 0   0 0   0 0   0 0   0     1562
.....
                                                                  11100011
                                                                  11001001
                                                                  11010011
        COMPILE   7.2:   NOP    201
                                                                  11101011
                                                                  11001001
                                                                  11010011
        COMPILE   7.3:   NOP    201
                                                                  11101011
                                                                  11001001
                                                                  11010011
        COMPILE   8.0:   NOP    201
                                                                  11101011
                                                                  11001001
                                                                  11010011
        COMPILE   8.1:   NOP    201
                                                                  11101011
                                                                  11001001
                                                                  11010011
        COMPILE   8.2:   NOP    201
                                                                  11101011
                                                                  11001001
                                                                  11010011
        COMPILE   8.3:   NOP    201
                                                                  11101011
                                                                  11001001
                                                                  11010011
        COMPILE   9.0:   NOP    201
                                                                  11101011
                                                                  11001001
```

```
                                                                  11010011
         COMPILE   9.1:   NOP    201
                                                                  11101011
                                                                  11001001
                                                                  11010011
         COMPILE   9.2:   NOP    201
                                                                  11101011
                                                                  11001001
                                                                  11010011
         COMPILE   9.3:   NOP    201
                                                                  11101011
                                                                  11001001
                                                                  11010011
         COMPILE  10.0:   NOP    201
                                                                  11101011
                                                                  11001001
                                                                  11010011
         COMPILE  10.1:   NOP    201
                                                                  11101011
                                                                  11001001
                                                                  11010011
         COMPILE  10.2:   NOP    201
                                                                  11101011
                                                                  11001001
                                                                  11010011
         COMPILE  10.3:   NOP    201
 650 502146   2   INE A0:L2,A1:L1.        201        16           7          1         1024 0   0 0   0 0   0 0   0    1700
 658 222 15   2   INE A0:L2,A1:L1.        201        16           7          1         1024 0   0 0   0 0   0 0   0    1701
 659 711196   2   INE A0:L2,A1:L1.          7         1        1024          5         3313 0   0 0   0 0   0 0   0    1702
                                                                  11101011
                                                                  00000111
                                                                  11000100
         COMPILE  11.0:   LPKRO    7
 660 500   3  2   INE A0:L2,A1:L1.          1      1024           5 33132751467648 0   0 0   0 0   0 0   0    1703
   3 300   2  3   INE A0:L2,A1:L1.          1      1024           5 33132751467648 0   0 0   0 0   0 0   0    1704
.....
  58 501237   1                  IF         0         1        1024          5         3313 0   0 0   0 0   0 0   0    1736
 493 421189   1                  IF         0         1        1024          5         3313 0   0 0   0 0   0 0   0    1737
 445 101174   1                  IF       494         0           1       1024            5 0   0 0   0 0   0 0   0    1738
                                                                  01011111
*************** X=0, * SET X =Y+Z(I)/Z(J-1)*100000-I.                                          *****                    1738
 446 501194   1                  X        494         0           1       1024            5 0   0 0   0 0   0 0   0    1739
 450 410244   1                  X        494         0           1       1024            5 0   0 0   0 0   0 0   0    1740
 244 410214   1                  X        451       494           0          1         1024 0   0 0   0 0   0 0   0    1741
 214 410192   1                  X        245       451         494          0            1 0   0 0   0 0   0 0   0    1742
 192 400153   1                  X        215       245         451        494            0 0   0 0   0 0   0 0   0    1743
 153 100101   1                  X        193       215         245        451          494 0   0 0   0 0   0 0   0    1744
 155 101105   1                  X        193       215         245        451          494 0   0 0   0 0   0 0   0    1745
 157 401 44   1                  X        193       215         245        451          494 0   0 0   0 0   0 0   0    1746
 300 001253   1                  X        158       193         215        245          451 0   0 0   0 0   0 0   0    1747
 301 300 13   1                  X        253       158         193        215          245 0   0 0   0 0   0 0   0    1748
 303 002  4   1                  X        253       158         193        215          245 0   0 0   0 0   0 0   0    1749
 304 710  0   1                  X          1       158         193        215          245 0   0 0   0 0   0 0   0    1750
 305 600  2   1                  X          1       158         193        215          245 0   0 0   0 0   0 0   0    1751
 306 700180   1                  X          0         1         158        193          215 0   0 0   0 0   0 0   0    1752
 307 301211   1                  X          0         1         158        193          215 0   0 0   0 0   0 0   0    1753
 308 511 45   1                  X          0         1         158        193          215 0   0 0   0 0   0 0   0    1754
 301 300 13   2                  X          1       158         193        215          245 0   0 0   0 0   0 0   0    1755
 303 002  4   2                  X          1       158         193        215          245 0   0 0   0 0   0 0   0    1756
 304 710  0   2                  X          5       158         193        215          245 0   0 0   0 0   0 0   0    1757
 305 600  6   2                  X          5       158         193        215          245 0   0 0   0 0   0 0   0    1758
 306 700180   2                  X          0         5         158        193          215 0   0 0   0 0   0 0   0    1759
 307 301211   2                  X          0         5         158        193          215 0   0 0   0 0   0 0   0    1760
 308 511 45   2                  X          0         5         158        193          215 0   0 0   0 0   0 0   0    1761
 301 300 13   3                  X          5       158         193        215          245 0   0 0   0 0   0 0   0    1762
 303 002  4   3                  X          5       158         193        215          245 0   0 0   0 0   0 0   0    1763
 304 710  0   3                  X          9       158         193        215          245 0   0 0   0 0   0 0   0    1764
 305 600 10   3                  X          9       158         193        215          245 0   0 0   0 0   0 0   0    1765
 306 700180   3                  X          0         9         158        193          215 0   0 0   0 0   0 0   0    1766
 307 301211   3                  X          0         9         158        193          215 0   0 0   0 0   0 0   0    1767
 308 511 45   3                  X          0         9         158        193          215 0   0 0   0 0   0 0   0    1768
.....
 302 501 62   1                  X         13       158         193        215          245 0   0 0   0 0   0 0   0    1777
 318 710  0   1                  X         13       158         193        215          245 0   0 0   0 0   0 0   0    1778
 319 600 14   1                  X         13       158         193        215          245 0   0 0   0 0   0 0   0    1779
 320 610  0   1                  X          0        13         158        193          215 0   0 0   0 0   0 0   0    1780
 321 042  4   1                  X          0         0          13        158          193 0   0 0   0 0   0 0   0    1781
 322 011  0   1                  X          0         0          13        158          193 0   0 0   0 0   0 0   0    1782
 323 310  0   1                  X          0        13         158        193          215 0   0 0   0 0   0 0   0    1783
 324 501 78   1                  X         13       158         193        215          245 0   0 0   0 0   0 0   0    1784
 334 600180   1                  X         13       158         193        215          245 0   0 0   0 0   0 0   0    1785
```

335	720	0	1		X	211	13	158	193	215 0	0 0	0 0	0 0 0	1786
336	611	14	1		X	211	13	158	193	215 0	0 0	0 0	0 0 0	1787
337	001	1	1		X	13	158	193	215	245 0	0 0	0 0	0 0 211	1788
338	720	0	1		X	1	13	158	193	215 0	0 0	0 0	0 0 211	1789
339	611	13	1		X	1	13	158	193	215 0	0 0	0 0	0 0 211	1790
340	713	0	1		X	13	158	193	215	245 0	0 0	0 0	0 1 211	1791
159	600	180	1		X	13	193	215	245	451 0	0 0	0 0	0 1 211	1792
160	711	67	1		X	211	13	193	215	245 0	0 0	0 0	0 1 211	1793
								01100110						
								00001011						
								11010011						
								01000011						
COMPILE	11.1:	LKBR1	211	X										
161	701	68	1		X	13	193	215	245	451 0	0 0	0 0	0 1 211	1794
								11100100						
								00001101						
								01000100						
COMPILE	11.2:	LIB	13											
162	012	5	1		X	13	193	215	245	451 0	0 0	0 0	0 1 211	1795
163	500	165	1		X	13631488	193	215	245	451 0	0 0	0 0	0 1 211	1796
165	101	174	1		X	13631488	193	215	245	451 0	0 0	0 0	0 1 211	1797
166	712	0	1		X=	13631488	193	215	245	451 0	0 0	0 0	0 1 211	1798
193	500	206	1		X=	13631486	215	245	451	494 0	0 0	0 0	0 1 211	1799
206	001	0	1		X=	13631488	215	245	451	494 0	0 0	0 0	0 1 211	1800
207	722	0	1		X=	0	13631488	215	245	451 0	0 0	0 0	0 1 211	1801
216	101	173	1		X=	0	13631488	245	451	494 0	0 0	0 0	0 1 211	1802
217	500	238	1		X=	0	13631488	245	451	494 0	0 0	0 0	0 1 211	1803
238	101	144	1		X=	0	13631488	245	451	494 0	0 0	0 0	0 1 211	1804
239	722	0	1		X=	0	13631488	245	451	494 0	0 0	0 0	0 1 211	1805
246	700	0	1		X=	0	13631488	451	494	0 0	0 0	0 0	0 1 211	1806
247	021	4	1		X=	13631488	451	494	0	1 0	0 0	0 0	0 1 211	1807
								11101101						
								00000000						
								00101111						
COMPILE	11.3:	MOD3	0											
								11101101						
								00000000						
								11011101						
COMPILE	12.0:	TRA1	0											
248	001	1	1		X=	451	494	0	1	1024 0	0 0	0 0	0 0 211	1809
249	611	105	1		X=	1	451	494	0	1 0	0 0	0 0	0 0 211	1810
250	100	155	1		X=	451	494	0	1	1024 0	0 0	0 0	0 0 211	1811
252	100	151	1		X=	451	494	0	1	1024 0	0 0	0 0	0 0 211	1812
254	401	35	1		X=	451	494	0	1	1024 0	0 0	0 0	0 0 211	1813
291	600	105	1		X=	255	451	494	0	1 0	0 0	0 0	0 0 211	1814
292	311	2	1		X=	1	255	451	494	0 0	0 0	0 0	0 0 211	1815
293	702	0	1		X=	255	451	494	0	1 0	0 0	0 0	0 0 211	1816
255	702	0	1		X=	451	494	0	1	1024 0	0 0	0 0	0 0 211	1817
452	101	147	1		X=	494	0	1	1024	5 0	0 0	0 0	0 0 211	1818
454	401	18	1		X=	494	0	1	1024	5 0	0 0	0 0	0 0 211	1819
274	420	214	1		X=	455	494	0	1	1024 0	0 0	0 0	0 0 211	1820
214	410	192	2		X=	275	455	494	0	1 0	0 0	0 0	0 0 211	1821
192	400	153	2		X=	215	275	455	494	0 0	0 0	0 0	0 0 211	1822
153	100	101	2		X=	193	215	275	455	494 0	0 0	0 0	0 0 211	1823
155	101	105	2		X=0	193	215	275	455	494 0	0 0	0 0	0 0 211	1824
.....194	410	68	1		X=0	215	275	455	494	0 0	0 0	0 0	0 0 211	1826
.....196	400	68	1		X=0	0	215	275	455	494 0	0 0	0 0	0 0 211	1835
.....198	001	1	1		X=0,	0	215	275	455	494 0	0 0	0 0	0 0 211	1842
199	722	0	1		X=0,	1	0	215	275	455 0	0 0	0 0	0 0 211	1843
216	101	173	2		X=0,	1	0	275	455	494 0	0 0	0 0	0 0 211	1844
217	500	238	2		X=0,	1	0	275	455	494 0	0 0	0 0	0 0 211	1845
238	101	144	2		X=0,	1	0	275	455	494 0	0 0	0 0	0 0 211	1846
239	722	0	2		X=0,	1	0	275	455	494 0	0 0	0 0	0 0 211	1847
275	301	2	1		X=0,	1	0	455	494	0 0	0 0	0 0	0 0 211	1848
276	401	35	1		X=0,	1	0	455	494	0 0	0 0	0 0	0 0 211	1849
291	600	105	2		X=0,	277	1	0	455	494 0	0 0	0 0	0 0 211	1850
292	311	2	2		X=0,	1	277	1	0	455 0	0 0	0 0	0 0 211	1851
293	702	0	2		X=0,	277	1	0	455	494 0	0 0	0 0	0 0 211	1852
277	700	0	1		X=0,	1	0	455	494	0 0	0 0	0 0	0 0 211	1853
278	021	25	1		X=0,	0	455	494	0	1 0	0 0	0 0	0 0 211	1854
								11100000						
								00000000						
								11010010						
COMPILE	12.1:	SUK	0											
279	702	0	1		X=0,	455	494	0	1	1024 0	0 0	0 0	0 0 211	1856
455	100	155	1		X=0,	494	0	1	1024	5 0	0 0	0 0	0 0 211	1857
457	101	151	1		X=0,	494	0	1	1024	5 0	0 0	0 0	0 0 211	1858
458	501	205	1		X=0,	494	0	1	1024	5 0	0 0	0 0	0 0 211	1859

```
461 401 35   1            X=0,        494         0         1      1024         5 0   0 0   0 0   0 0 211   1860
291 600105   3            X=0,        462       494         0         1      1024 0   0 0   0 0   0 0 211   1861
292 311  2   3            X=0,          1       462       494         0         1 0   0 0   0 0   0 0 211   1862
293 702  0   3            X=0,        462       494         0         1      1024 0   0 0   0 0   0 0 211   1863
462 001 17   1            X=0,        494         0         1      1024         5 0   0 0   0 0   0 0 211   1864
463 001  1   1            X=0,         17       494         0         1      1024 0   0 0   0 0   0 0 211   1865
464 722  0   1            X=0,          1        17       494         0         1 0   0 0   0 0   0 0 211   1866
494 101148   1            X=0,          1        17         0         1      1024 0   0 0   0 0   0 0 211   1867
496 100 10   1            X=0,          1        17         0         1      1024 0   0 0   0 0   0 0 211   1868
498 401255   1         X=0, *           1        17         0         1      1024 0   0 0   0 0   0 0 211   1869
511 611115   1         X=0, *         499         1        17         0         1 0   0 0   0 0   0 0 211   1870
512 630  0   1         X=0, *           1        17         0         1      1024 0   0 0   0 0   0 0 211   1871
513 210  8   1         X=0, *           0         1        17         0         1 0   0 0   0 0   0 0 211   1872
515 700  0   1         X=0, *           1        17         0         1      1024 0   0 0   0 0   0 0 211   1873
516 721  1   1         X=0, *          17         0         1      1024         5 0   0 0   0 0   0 0 211   1874
                                                     11101111
                                                     00010001
                                                     00000001
      COMPILE   12.2:    SKL     17
517 600110   1         X=0, *           1      1024         5      33132751467648 0   0 0   0 0   0 0 211   1875
518 001  2   1         X=0, *        3084         1      1024         5      3313 0   0 0   0 0   0 0 211   1876
519 701  0   1         X=0, *           2      3084         1      1024         5 0   0 0   0 0   0 0 211   1877
                                                     11100001
                                                     00000010
                                                     00000000
      COMPILE   12.3:    STOP     2
520 600115   1         X=0, *           2      3084         1      1024         5 0   0 0   0 0   0 0 211   1878
521 702  0   1         X=0, *         499         2      3084         1      1024 0   0 0   0 0   0 0 211   1879
499 500 14   1         X=0, *           2      3084         1      1024         5 0   0 0   0 0   0 0 211   1880
.....
 39 002  1   1         X=0, *           0         2      3084         1      1024 0   0 0   0 0   0 0 211   1899
.....
 64 501144   1       X=0, * SET         1         2      3084         1      1024 0   0 0   0 0   0 0 211   1907
400 001217   1       X=0, * SET         1         2      3084         1      1024 0   0 0   0 0   0 0 211   1908
401 400153   1       X=0, * SET       217         1         2      3084         1 0   0 0   0 0   0 0 211   1909
153 100101   3       X=0, * SET       402       217         1         2      3084 0   0 0   0 0   0 0 211   1910
155 101105   3     X=0, * SET X       402       217         1         2      3084 0   0 0   0 0   0 0 211   1911
157 401 44   2     X=0, * SET X       402       217         1         2      3084 0   0 0   0 0   0 0 211   1912
300 001253   2     X=0, * SET X       158       402       217         1         2 0   0 0   0 0   0 0 211   1913
.....
309 600180   1     X=0, * SET X       211        13       158       402       217 0   0 0   0 0   0 0 211   1941
310 011  0   1     X=0, * SET X       211       211        13       158       402 0   0 0   0 0   0 0 211   1942
311 042  4   1     X=0, * SET X       211        13       158       402       217 0   0 0   0 0   0 0 211   1943
312 311  0   1     X=0, * SET X         0        13       158       402       217 0   0 0   0 0   0 0 211   1944
314 710  0   1     X=0, * SET X        13       158       402       217         1 0   0 0   0 0   0 0 211   1945
315 602 13   1     X=0, * SET X        13       158       402       217         1 0   0 0   0 0   0 0 211   1946
316 712  0   1     X=0, * SET X        13       158       402       217         1 0   0 0   0 0   0 1 211   1947
158 500162   1     X=0, * SET X        13       402       217         1         2 0   0 0   0 0   0 1 211   1948
162 012  5   2     X=0, * SET X        13       402       217         1         2 0   0 0   0 0   0 1 211   1949
163 500165   2     X=0, * SET X  13631488       402       217         1         2 0   0 0   0 0   0 1 211   1950
165 101174   2     X=0, * SET X  13631488       402       217         1         2 0   0 0   0 0   0 1 211   1951
166 712  0   2   X=0, * SET X =  13631488       402       217         1         2 0   0 0   0 0   0 1 211   1952
402 501172   1   X=0, * SET X =  13631488       217         1         2      3084 0   0 0   0 0   0 1 211   1953
428 102147   1   X=0, * SET X =  13631488       217         1         2      3084 0   0 0   0 0   0 1 211   1954
429 420244   1   X=0, * SET X =  13631488       217         1         2      3084 0   0 0   0 0   0 1 211   1955
244 410214   2   X=0, * SET X =       430  13631488       217         1         2 0   0 0   0 0   0 1 211   1956
214 410192   3   X=0, * SET X =       245       430  13631488       217         1 0   0 0   0 0   0 1 211   1957
192 400153   3   X=0, * SET X =       215       245       430  13631488       217 0   0 0   0 0   0 1 211   1958
.....
157 401 44   3   X=0, * SET X =Y      193       215       245       430  13631488 0   0 0   0 0   0 1 211   1961
300 001253   3   X=0, * SET X =Y      158       193       215       245       430 0   0 0   0 0   0 1 211   1962
.....
302 501 62   2   X=0, * SET X =Y       13       158       193       215       245 0   0 0   0 0   0 1 211   1992
318 710  0   2   X=0, * SET X =Y       13       158       193       215       245 0   0 0   0 0   0 1 211   1993
319 600 14   2   X=0, * SET X =Y       13       158       193       215       245 0   0 0   0 0   0 1 211   1994
320 610  0   2   X=0, * SET X =Y      211        13       158       193       215 0   0 0   0 0   0 1 211   1995
321 042  4   2   X=0, * SET X =Y      211       211        13       158       193 0   0 0   0 0   0 1 211   1996
322 011  0   2   X=0, * SET X =Y        0       211        13       158       193 0   0 0   0 0   0 1 211   1997
323 310  0   2   X=0, * SET X =Y      211        13       158       193       215 0   0 0   0 0   0 1 211   1998
325 301  1   1   X=0, * SET X =Y       13       158       193       215       245 0   0 0   0 0   0 1 211   1999
326 501 61   1   X=0, * SET X =Y       13       158       193       215       245 0   0 0   0 0   0 1 211   2000
317 003  4   1   X=0, * SET X =Y       13       158       193       215       245 0   0 0   0 0   0 1 211   2001
318 710  0   3   X=0, * SET X =Y        9       158       193       215       245 0   0 0   0 0   0 1 211   2002
319 600 10   3   X=0, * SET X =Y        9       158       193       215       245 0   0 0   0 0   0 1 211   2003
320 610  0   3   X=0, * SET X =Y        0         9       158       193       215 0   0 0   0 0   0 1 211   2004
321 042  4   3   X=0, * SET X =Y        0         0         9       158       193 0   0 0   0 0   0 1 211   2005
322 011  0   3   X=0, * SET X =Y        0         0         9       158       193 0   0 0   0 0   0 1 211   2006
323 310  0   3   X=0, * SET X =Y        0         9       158       193       215 0   0 0   0 0   0 1 211   2007
324 501 78   2   X=0, * SET X =Y        9       158       193       215       245 0   0 0   0 0   0 1 211   2008
334 600180   2   X=0, * SET X =Y        9       158       193       215       245 0   0 0   0 0   0 1 211   2009
335 720  0   2   X=0, * SET X =Y      210         9       158       193       215 0   0 0   0 0   0 1 211   2010
```

```
336 611 10  2     X=0, * SET X =Y          210          9        158        193        215 0  0 0  0 0   0 1 211     2011
337 001  1  2     X=0, * SET X =Y            9        158        193        215        245 0  0 0  0 0 210 1 211     2012
338 720  0  2     X=0, * SET X =Y            1          9        158        193        215 0  0 0  0 0 210 1 211     2013
339 611  9  2     X=0, * SET X =Y            1          9        158        193        215 0  0 0  0 0 210 1 211     2014
340 713  0  2     X=0, * SET X =Y            9        158        193        215        245 0  0 0  0 1 210 1 211     2015
159 600180  2     X=0, * SET X =Y            9        193        215        245        430 0  0 0  0 1 210 1 211     2016
160 711 67  2     X=0, * SET X =Y          210          9        193        215        245 0  0 0  0 1 210 1 211     2017
                                                                  11100010
                                                                  11010010
                                                                  01000011

      COMPILE  13.0:   LKBR1  210   Y
161 701 68  2     X=0, * SET X =Y            9        193        215        245        430 0  0 0  0 1 210 1 211     2018
                                                                  11101000
                                                                  00001001
                                                                  01000100

      COMPILE  13.1:   LIB      9
162 012  5  3     X=0, * SET X =Y            9        193        215        245        430 0  0 0  0 1 210 1 211     2019
163 500165  3     X=0, * SET X =Y      9437184        193        215        245        430 0  0 0  0 1 210 1 211     2020
165 101174  3     X=0, * SET X =Y      9437184        193        215        245        430 0  0 0  0 1 210 1 211     2021
166 712  0  3   X=0, * SET X =Y+      9437184        193        215        245        430 0  0 0  0 1 210 1 211     2022
193 500206  2   X=0, * SET X =Y+      9437184        215        245        430 13631488 0  0 0  0 1 210 1 211     2023
206 001  0  2   X=0, * SET X =Y+      9437184        215        245        430 13631488 0  0 0  0 1 210 1 211     2024
207 722  0  2   X=0, * SET X =Y+            0  9437184        215        245        430 0  0 0  0 1 210 1 211     2025
216 101173  3   X=0, * SET X =Y+            0  9437184        245        430 13631488 0  0 0  0 1 210 1 211     2026
217 500238  3   X=0, * SET X =Y+            0  9437184        245        430 13631488 0  0 0  0 1 210 1 211     2027
238 101144  3   X=0, * SET X =Y+            0  9437184        245        430 13631488 0  0 0  0 1 210 1 211     2028
239 722  0  3   X=0, * SET X =Y+            0  9437184        245        430 13631488 0  0 0  0 1 210 1 211     2029
246 700  0  2   X=0, * SET X =Y+            0  9437184        430   13631488        217 0  0 0  0 1 210 1 211     2030
247 021  4  2   X=0, * SET X =Y+    9437184        430 13631488        217          1 0  0 0  0 1 210 1 211     2031
                                                                  11101001
                                                                  00000000
                                                                  00101011

      COMPILE  13.2:   MOD2     0
                                                                  11101001
                                                                  00000000
                                                                  11011101

      COMPILE  13.3:   TRA1     0
248 001  1  2     X=0, * SET X =Y+          430   13631488        217          1 2 0  0 0  0 0 210 1 211     2033
249 611105  2     X=0, * SET X =Y+            1        430 13631488        217 1 0  0 0  0 0 210 1 211     2034
250 100155  2     X=0, * SET X =Y+          430   13631488        217          1 2 0  0 0  0 0 210 1 211     2035
251 501  0  1     X=0, * SET X =Y+          430   13631488        217          1 2 0  0 0  0 0 210 1 211     2036
256 401  7  1     X=0, * SET X =Y+          430   13631488        217          1 2 0  0 0  0 0 210 1 211     2037
263 420214  1     X=0, * SET X =Y+          257        430 13631488        217 1 0  0 0  0 0 210 1 211     2038

**:**:
302 501 62  3      =0, * SET X =Y+Z         13        158        193        215 264 0  0 0  0 0 210 1 211     2074

**:**:
325 301  1  2      =0, * SET X =Y+Z         13        158        193        215 264 0  0 0  0 0 210 1 211     2081
326 501 61  2      =0, * SET X =Y+Z         13        158        193        215 264 0  0 0  0 0 210 1 211     2082
317 003  4  2      =0, * SET X =Y+Z         13        158        193        215 264 0  0 0  0 0 210 1 211     2083

**:**:
325 301  1  3      =0, * SET X =Y+Z          9        158        193        215 264 0  0 0  0 0 210 1 211     2090
326 501 61  3      =0, * SET X =Y+Z          9        158        193        215 264 0  0 0  0 0 210 1 211     2091
317 003  4  3      =0, * SET X =Y+Z          9        158        193        215 264 0  0 0  0 0 210 1 211     2092

**:**:
324 501 78  3      =0, * SET X =Y+Z          5        158        193        215 264 0  0 0  0 0 210 1 211     2099
334 600180  3      =0, * SET X =Y+Z          5        158        193        215 264 0  0 0  0 0 210 1 211     2100
335 720  0  3      =0, * SET X =Y+Z        209          5        158        193 215 0  0 0  0 0 210 1 211     2101
336 611  6  3      =0, * SET X =Y+Z        209          5        158        193 215 0  0 0  0 0 210 1 211     2102
337 001  1  3      =0, * SET X =Y+Z          5        158        193        215 264 0  0 0 209 0 210 1 211     2103
338 720  0  3      =0, * SET X =Y+Z          1          5        158        193 215 0  0 0 209 0 210 1 211     2104
339 611  5  3      =0, * SET X =Y+Z          1          5        158        193 215 0  0 0 209 0 210 1 211     2105
340 713  0  3      =0, * SET X =Y+Z          5        158        193        215 264 0  0 1 209 0 210 1 211     2106
159 600180  3      =0, * SET X =Y+Z          5        193        215        264 257 0  0 1 209 0 210 1 211     2107
160 711 67  3      =0, * SET X =Y+Z        209          5        193        215 264 0  0 1 209 0 210 1 211     2108
                                                                  11100000
                                                                  11010001
                                                                  01000011

      COMPILE  14.0:   LKBR1  209   7
161 701 68  3      =0, * SET X =Y+Z          5        193        215        264 257 0  0 1 209 0 210 1 211     2109
                                                                  11101011
                                                                  00000101
                                                                  01000100

      COMPILE  14.1:   LIB      5

**:**:
167 410153  1      0, * SET X =Y+Z(   5242880        193        215        264 257 0  0 1 209 0 210 1 211     2113

**:**:
154 500164  1      , * SET X =Y+Z(I        168  5242880        193        215 264 0  0 1 209 0 210 1 211     2115
164 600180  1      , * SET X =Y+Z(I        168  5242880        193        215 264 0  0 1 209 0 210 1 211     2116

**:**:
169 611180  1        * SET X =Y+Z(I)       254  5242880        193        215 264 0  0 1 209 0 210 1 211     2119
170 401 44  1        * SET X =Y+Z(I)   5242880        193        215        264 257 0  0 1 209 0 210 1 211     2120
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•••••
 172 401 27   1     * SET X =Y+Z(I)          1    5242680        193        215        264 1 254 1 209 0 210 1 211      2193
 283 600105   1     * SET X =Y+Z(I)        173          1    5242880        193        215 1 254 1 209 0 210 1 211      2194
 284 311  1   1     * SET X =Y+Z(I)          1        173          1    5242880        193 1 254 1 209 0 210 1 211      2195
 286 001255   1     * SET X =Y+Z(I)        173          1    5242880        193        215 1 254 1 209 0 210 1 211      2196
 287 711217   1     * SET X =Y+Z(I)        255        173          1    5242880        193 1 254 1 209 0 210 1 211      2197
                                                              11100101
                                                              11111111
                                                              11011001

      COMPILE   14,2:   TRM1   255
 288 001  2   1     * SET X =Y+Z(I)        173          1    5242880        193        215 1 254 1 209 0 210 1 211      2198
 289 611105   1     * SET X =Y+Z(I)          2        173          1    5242880        193 1 254 1 209 0 210 1 211      2199
 290 702  0   1     * SET X =Y+Z(I)        173          1    5242880        193        215 1 254 1 209 0 210 1 211      2200
 173 600180   1     * SET X =Y+Z(I)          1    5242680        193        215        264 1 254 1 209 0 210 1 211      2201
 174 711221   1     * SET X =Y+Z(I)        254          1    5242880        193        215 1 254 1 209 0 210 1 211      2202
                                                              11100100
                                                              11111110
                                                              11011101

      COMPILE   14,3:   TRA1   254   I
 175 701167   1     * SET X =Y+Z(I)          1    5242680        193        215        264 1 254 1 209 0 210 1 211      2203
                                                              11100001
                                                              00000001
                                                              10100111

      COMPILE   15,0:   TAIR      1
 176 012  4   1     * SET X =Y+Z(I)          1    5242680        193        215        264 1 254 1 209 0 210 1 211      2204
 177 011  0   1     * SET X =Y+Z(I)      65536    5242680        193        215        264 1 254 1 209 0 210 1 211      2205
 178 100155   1     * SET X =Y+Z(I)    5308416        193        215        264        257 1 254 1 209 0 210 1 211      2206
 180 101151   1     * SET X =Y+Z(I)    5308416        193        215        264        257 1 254 1 209 0 210 1 211      2207
 181 500189   1     * SET X =Y+Z(I)    5308416        193        215        264        257 1 254 1 209 0 210 1 211      2208
 189 102142   1     * SET X =Y+Z(I)    5308416        193        215        264        257 1 254 1 209 0 210 1 211      2209
 190 003  1   1     * SET X =Y+Z(I)    5308416        193        215        264        257 1 254 1 209 0 210 1 211      2210
 191 712  0   1     * SET X =Y+Z(I)    5308671        193        215        264        257 1 254 1 209 0 210 1 211      2211
 193 500206   3     * SET X =Y+Z(I)    5308671        215        264        257        430 1 254 1 209 0 210 1 211      2212
 206 001  0   3     * SET X =Y+Z(I)    5308671        215        264        257        430 1 254 1 209 0 210 1 211      2213
 207 722  0   3     * SET X =Y+Z(I)          0    5308671        215        264        257 1 254 1 209 0 210 1 211      2214

•••••
 240 001237   1    * SET X =Y+Z(I)/          0    5308671        264        257        430 1 254 1 209 0 210 1 211      2218
 241 500219   1    * SET X =Y+Z(I)/        237          0    5308671        264        257 1 254 1 209 0 210 1 211      2219
 219 420192   1    * SET X =Y+Z(I)/        237          0    5308671        264        257 1 254 1 209 0 210 1 211      2220

•••••
 309 600180   2      SET X =Y+Z(I)/Z       209          5        158        193        220 1 254 1 209 0 210 1 211      2239
 310 011  0   2      SET X =Y+Z(I)/Z       209        209          5        158        193 1 254 1 209 0 210 1 211      2240
 311 042  4   2      SET X =Y+Z(I)/Z       209          5        158        193        220 1 254 1 209 0 210 1 211      2241
 312 311  0   2      SET X =Y+Z(I)/Z         0          5        158        193        220 1 254 1 209 0 210 1 211      2242
 314 710  0   2      SET X =Y+Z(I)/Z         5        158        193        220        237 1 254 1 209 0 210 1 211      2243
 315 602  5   2      SET X =Y+Z(I)/Z         5        158        193        220        237 1 254 1 209 0 210 1 211      2244
 316 712  0   2      SET X =Y+Z(I)/Z         5        158        193        220        237 1 254 2 209 0 210 1 211      2245
 158 500162   2      SET X =Y+Z(I)/Z         5        193        220        237          0 1 254 2 209 0 210 1 211      2246

•••••
 167 410153   2    SET X =Y+Z(I)/Z(    5242880        193        220        237          0 1 254 2 209 0 210 1 211      2250

•••••
 154 500164   2    ET X =Y+Z(I)/Z(J        168    5242680        193        220        237 1 254 2 209 0 210 1 211      2252
 164 600180   2    ET X =Y+Z(I)/Z(J        168    5242680        193        220        237 1 254 2 209 0 210 1 211      2253

•••••
 169 611180   2    T X =Y+Z(I)/Z(J-        253    5242680        193        220        237 1 254 2 209 0 210 1 211      2256
 170 401 44   2    T X =Y+Z(I)/Z(J-    5242880        193        220        237          0 1 254 2 209 0 210 1 211      2257

•••••
 327 710  0   1    T X =Y+Z(I)/Z(J-          1        171    5242880        193        220 1 254 2 209 0 210 1 211      2323
 328 600  1   1    T X =Y+Z(I)/Z(J-          1        171    5242880        193        220 1 254 2 209 0 210 1 211      2324
 329 310  0   1    T X =Y+Z(I)/Z(J-          1          1        171    5242880        193 1 254 2 209 0 210 1 211      2325
 331 002  4   1    T X =Y+Z(I)/Z(J-          1        171    5242880        193        220 1 254 2 209 0 210 1 211      2326
 332 303 17   1    T X =Y+Z(I)/Z(J-          5        171    5242880        193        220 1 254 2 209 0 210 1 211      2327
 333 501 71   1    T X =Y+Z(I)/Z(J-          5        171    5242880        193        220 1 254 2 209 0 210 1 211      2328
 327 710  0   2    T X =Y+Z(I)/Z(J-          5        171    5242880        193        220 1 254 2 209 0 210 1 211      2329
 328 600  5   2    T X =Y+Z(I)/Z(J-          5        171    5242880        193        220 1 254 2 209 0 210 1 211      2330
 329 310  0   2    T X =Y+Z(I)/Z(J-          2          5        171    5242880        193 1 254 2 209 0 210 1 211      2331
 331 002  4   2    T X =Y+Z(I)/Z(J-          5        171    5242880        193        220 1 254 2 209 0 210 1 211      2332
 332 303 17   2    T X =Y+Z(I)/Z(J-          9        171    5242880        193        220 1 254 2 209 0 210 1 211      2333
 333 501 71   2    T X =Y+Z(I)/Z(J-          9        171    5242880        193        220 1 254 2 209 0 210 1 211      2334
 327 710  0   3    T X =Y+Z(I)/Z(J-          9        171    5242880        193        220 1 254 2 209 0 210 1 211      2335
 328 600  9   3    T X =Y+Z(I)/Z(J-          9        171    5242880        193        220 1 254 2 209 0 210 1 211      2336
 329 310  0   3    T X =Y+Z(I)/Z(J-          0          9        171    5242880        193 1 254 2 209 0 210 1 211      2337
 330 501 78   1    T X =Y+Z(I)/Z(J-          9        171    5242880        193        220 1 254 2 209 0 210 1 211      2338

•••••
 172 401 27   2    T X =Y+Z(I)/Z(J-          9    5242680        193        220        237 1 254 2 209 1 253 1 211      2346
 283 600105   2    T X =Y+Z(I)/Z(J-        173          9    5242880        193        220 1 254 2 209 1 253 1 211      2347
 284 311  1   2    T X =Y+Z(I)/Z(J-          2        173          9    5242880        193 1 254 2 209 1 253 1 211      2348
 285 702  0   1    T X =Y+Z(I)/Z(J-        173          9    5242880        193        220 1 254 2 209 1 253 1 211      2349
 173 600180   2    T X =Y+Z(I)/Z(J-          9    5242880        193        220        237 1 254 2 209 1 253 1 211      2350
 174 711221   2    T X =Y+Z(I)/Z(J-        253          9    5242880        193        220 1 254 2 209 1 253 1 211      2351
                                                              11101100
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                                                                      11111101
                                                                      11011101
          COMPILE   15.1:    TRA1    253    J
175 701167  2        T X =Y+Z(I)/Z(J-          9    5242680          193         220        237 1 254 2 209 1 253 1 211     2352
                                                                      11100010
                                                                      00001001
                                                                      10100111
          COMPILE   15.2:    IAIR       9
176 012   4  2       T X =Y+Z(I)/Z(J-          9    5242680          193         220        237 1 254 2 209 1 253 1 211     2353
177 011   0  2       T X =Y+Z(I)/Z(J-     589824    5242680          193         220        237 1 254 2 209 1 253 1 211     2354
178 100155   2       T X =Y+Z(I)/Z(J-    5832704        193          220         237          0 1 254 2 209 1 253 1 211     2355
180 101151   2       T X =Y+Z(I)/Z(J-    5832704        193          220         237          0 1 254 2 209 1 253 1 211     2356
182 420  77  1       T X =Y+Z(I)/Z(J-    5832704        193          220         237          0 1 254 2 209 1 253 1 211     2357
...
183 700   0  1      X =Y+Z(I)/Z(J-1)           1    5832704          193         220        237 1 254 2 209 1 253 1 211     2375
184 003   1  1      X =Y+Z(I)/Z(J-1)     5832704        193          220         237          0 1 254 2 209 1 253 1 211     2376
185 500189   1      X =Y+Z(I)/Z(J-1)     5832959        193          220         237          0 1 254 2 209 1 253 1 211     2377
189 102142   2      X =Y+Z(I)/Z(J-1)     5832959        193          220         237          0 1 254 2 209 1 253 1 211     2378
190 003   1  2      X =Y+Z(I)/Z(J-1)     5832959        193          220         237          0 1 254 2 209 1 253 1 211     2379
191 712   0  2      X =Y+Z(I)/Z(J-1)     5832958        193          220         237          0 1 254 2 209 1 253 1 211     2380
...
220 101173   1      X =Y+Z(I)/Z(J-1)           0    5832958          237           0    5308671 1 254 2 209 1 253 1 211     2384
222 410208   1       =Y+Z(I)/Z(J-1)*           0    5832958          237           0    5308671 1 254 2 209 1 253 1 211     2385
208 102129   1       =Y+Z(I)/Z(J-1)*         223          0      5832958         237          0 1 254 2 209 1 253 1 211     2386
209 001   0  1      =Y+Z(I)/Z(J-1)*1         223          0      5832958         237          0 1 254 2 209 1 253 1 211     2387
210 101128   1      =Y+Z(I)/Z(J-1)*1           0        223            0     5832958        237 1 254 2 209 1 253 1 211     2388
212 002   1  1      Y+Z(I)/Z(J-1)*10           0        223            0     5832958        237 1 254 2 209 1 253 1 211     2389
213 500210   1      Y+Z(I)/Z(J-1)*10           1        223            0     5832958        237 1 254 2 209 1 253 1 211     2390
210 101128   2      Y+Z(I)/Z(J-1)*10           1        223            0     5832958        237 1 254 2 209 1 253 1 211     2391
212 002   1  2      +Z(I)/Z(J-1)*100           1        223            0     5832958        237 1 254 2 209 1 253 1 211     2392
213 500210   2      +Z(I)/Z(J-1)*100           2        223            0     5832958        237 1 254 2 209 1 253 1 211     2393
210 101128   3      +Z(I)/Z(J-1)*100           2        223            0     5832958        237 1 254 2 209 1 253 1 211     2394
212 002   1  3      Z(I)/Z(J-1)*1000           2        223            0     5832958        237 1 254 2 209 1 253 1 211     2395
213 500210   3      7(I)/Z(J-1)*1000           3        223            0     5832958        237 1 254 2 209 1 253 1 211     2396
...
211 712   0  1      )/Z(J-1)*100000-           5        223            0     5832958        237 1 254 2 209 1 253 1 211     2404
224 711164   1      )/Z(J-1)*100000-           5          0      5832958         237          0 1 254 2 209 1 253 1 211     2405
                                                                      11100100
                                                                      00000101
                                                                      10100100
          COMPILE   15.3:    LSR        5
225 401  27  1      )/Z(J-1)*100000-           0    5832958          237           0    5308671 1 254 2 209 1 253 1 211     2406
283 600105   3      )/Z(J-1)*100000-         226          0      5832958         237          0 1 254 2 209 1 253 1 211     2407
284 311   1  3      )/Z(J-1)*100000-           2        226            0     5832958        237 1 254 2 209 1 253 1 211     2408
285 702   0  2      )/Z(J-1)*100000-         226          0      5832958         237          0 1 254 2 209 1 253 1 211     2409
226 650   0  1      )/Z(J-1)*100000-           0    5832958          237           0    5308671 1 254 2 209 1 253 1 211     2410
227 750   0  1      )/Z(J-1)*100000-     5308671          0      5832958         237          0 1 254 2 209 1 253 1 211     2411
228 020236   1      )/Z(J-1)*100000-     5308671          0      5832958         237          0 1 254 2 209 1 253 1 211     2412
                                                                      11101011
                                                                      00000000
                                                                      00100111
          COMPILE   16.0:    MOD1       0
                                                                      11100101
                                                                      00000000
                                                                      00100011
          COMPILE   16.1:    MODO       0
                                                                      11100001
                                                                      11111111
                                                                      11011101
          COMPILE   16.2:    TRA1    255
229 310   1  1      )/Z(J-1)*100000-           0    5832958          237           0    5308671 0 254 1 209 1 253 1 211     2414
231 720   0  1      )/Z(J-1)*100000-     5832958        237            0     5308671        264 0 254 1 209 1 253 1 211     2415
232 741237   1      )/Z(J-1)*100000-     5832958        237            0     5308671        264 0 254 1 209 1 253 1 211     2416
                                                                      11100000
                                                                      00000000
                                                                      00100111
          COMPILE   16.3:    MOD1       0
                                                                      11100101
                                                                      00000000
                                                                      00101011
          COMPILE   17.0:    MOD2       0
                                                                      11101001
                                                                      11111110
                                                                      11101101
          COMPILE   17.1:    DIV1    254    I
233 001255   1      )/Z(J-1)*100000-         264        257          430    13631488        217 0 254 0 209 0 253 1 211     2417
234 001   2  1      )/Z(J-1)*100000-         255        264          257         430   13631488 0 254 0 209 0 253 1 211     2418
235 722   0  1      )/Z(J-1)*100000-           2        255          264         257        430 0 254 0 209 0 253 1 211     2419
264 301   2  1      )/Z(J-1)*100000-           2        255          257         430   13631488 0 254 0 209 0 253 1 211     2420
266 700   0  1      )/Z(J-1)*100000-           2        255          257         430   13631488 0 254 0 209 0 253 1 211     2421
267 021  17  1      )/Z(J-1)*100000-         255        257          430    13631488        217 0 254 0 209 0 253 1 211     2422
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```
                                                              11100010
                                                              11111111
                                                              11100001
         COMPILE   17.2:    ADA1    255
 268 001  1   1    )/Z(J-1)*100000-       257         430  13631488          217          1 0 254 0 209 0 253 1 211        2424
 269 611105   1    )/Z(J-1)*100000-         1         257       430  13631488          217 0 254 0 209 0 253 1 211        2425
 270 702  0   1    )/Z(J-1)*100000-       257         430  13631488          217          1 0 254 0 209 0 253 1 211        2426
 257 500250   1    )/Z(J-1)*100000-       430    13631488       217            1          2 0 254 0 209 0 253 1 211        2427
 250 100155   3    )/Z(J-1)*100000-       430    13631488       217            1          2 0 254 0 209 0 253 1 211        2428
 252 100151   2    )/Z(J-1)*100000-       430    13631488       217            1          2 0 254 0 209 0 253 1 211        2429
 253 501  2   1    )/Z(J-1)*100000-       430    13631488       217            1          2 0 254 0 209 0 253 1 211        2430
 258 401 18   1    )/Z(J-1)*100000-       430    13631488       217            1          2 0 254 0 209 0 253 1 211        2431
 274 420214   2    )/Z(J-1)*100000-       259         430  13631488          217          1 0 254 0 209 0 253 1 211        2432

•••154 500164  3   /Z(J-1)*100000-I       193         215       275          259        430 0 254 0 209 0 253 1 211        2436
 164 600180   3    /Z(J-1)*100000-I       193         215       275          259        430 0 254 0 209 0 253 1 211        2437

•••275 301  2  2   Z(J-1)*100000-I.         0         254       259          430   13631488 0 254 0 209 0 253 1 211        2447
 276 401 35   2    Z(J-1)*100000-I.         0         254       259          430   13631488 0 254 0 209 0 253 1 211        2448

•••277 700  0  2   Z(J-1)*100000-I.         0         254       259          430   13631488 0 254 0 209 0 253 1 211        2452
 278 021 24   2    Z(J-1)*100000-I.       254         259       430     13631488        217 0 254 0 209 0 253 1 211        2453
                                                              11101111
                                                              11111110
                                                              11100011
         COMPILE   17.3:    SUA1    254    I
 279 702  0   2    Z(J-1)*100000-I.       259         430  13631488          217          1 0 254 0 209 0 253 1 211        2455
 259 500250   1    Z(J-1)*100000-I.       430    13631488       217            1          2 0 254 0 209 0 253 1 211        2456

•••252 100151  3   Z(J-1)*100000-I.       430    13631488       217            1          2 0 254 0 209 0 253 1 211        2458
 254 401 35   2    Z(J-1)*100000-I.       430    13631488       217            1          2 0 254 0 209 0 253 1 211        2459

•••255 702  0  2   Z(J-1)*100000-I.       430    13631488       217            1          2 0 254 0 209 0 253 1 211        2463
 430 630  0   1    Z(J-1)*100000-I.  13631488         217         1            2       3084 0 254 0 209 0 253 1 211        2464
 431 310  1   1    Z(J-1)*100000-I.         1    13631488       217            1          2 0 254 0 209 0 253 1 211        2465
 432 040 71   1    Z(J-1)*100000-I.  13631488         217         1            2       3084 0 254 0 209 0 253 1 211        2466
                                                              11101100
                                                              00000000
                                                              00101111

         COMPILE   18.0:    MOD3      0
                                                              11101101
                                                              00000000
                                                              01000111
         COMPILE   18.1:    PROT1     0
 433 720  0   1    Z(J-1)*100000-I.  13631488         217         1            2       3084 0 254 0 209 0 253 1 211        2467
 434 731217   1    Z(J-1)*100000-I.  13631488         217         1            2       3084 0 254 0 209 0 253 1 211        2468
                                                              11100011
                                                              00000000
                                                              00101111

         COMPILE   18.2:    MOD3      0
                                                              11101101
                                                              00000000
                                                              11011001
         COMPILE   18.3:    TRM1      0
 435 500  3   1    Z(J-1)*100000-I.         2        3084         1         1024          5 0 254 0 209 0 253 0 211        2469

•••••4 510  2  1   Z(J-1)*100000-I.         2        3084         1         1024          5 0 254 0 209 0 253 0 211        2471
   2 402 23   1    Z(J-1)*100000-I.      3084           1      1024            5       3313 0 254 0 209 0 253 0 211        2472
 535 401 85   2    Z(J-1)*100000-I.         3        3084         1         1024          5 0 254 0 209 0 253 0 211        2473
 341 001  0   3    Z(J-1)*100000-I.       536           3      3084            1       1024 0 254 0 209 0 253 0 211        2474
 342 601  2   3    Z(J-1)*100000-I.         0         536         3         3084          1 0 254 0 209 0 253 0 211        2475
 343 601  6   3    Z(J-1)*100000-I.         0         536         3         3084          1 0   0 0 209 0 253 0 211        2476
 344 601 10   3    Z(J-1)*100000-I.         0         536         3         3084          1 0   0 0   0 0 253 0 211        2477
 345 611 14   3    Z(J-1)*100000-I.         0         536         3         3084          1 0   0 0   0 0   0 0 211        2478
 346 702  0   3    Z(J-1)*100000-I.       536           3      3084            1       1024 0   0 0   0 0   0 0   0        2479
 536 623  0   2    Z(J-1)*100000-I.         3        3084         1         1024          5 0   0 0   0 0   0 0   0        2480
 537 042  2   2    Z(J-1)*100000-I.      3084           3         1         1024          5 0   0 0   0 0   0 0   0        2481
 538 002 96   2    Z(J-1)*100000-I.        12           3         1         1024          5 0   0 0   0 0   0 0   0        2482
 539 710  0   2    Z(J-1)*100000-I.       108           3         1         1024          5 0   0 0   0 0   0 0   0        2483
 540 013108   2    Z(J-1)*100000-I.       108           3         1         1024          5 0   0 0   0 0   0 0   0        2484
                                                              01010100
                                                              01101100
 541 041  6   2    Z(J-1)*100000-I.       108           3         1         1024          5 0   0 0   0 0   0 0   0        2485
        FIXUP LOCATION   12.3
 542 012  2   2    Z(J-1)*100000-I.       108           3         1         1024          5 0   0 0   0 0   0 0   0        2486
 543 700  0   2    Z(J-1)*100000-I.     27660           3         1         1024          5 0   0 0   0 0   0 0   0        2487
 544 013 12   2    Z(J-1)*100000-I.         3           1      1024            5       3313 0   0 0   0 0   0 0   0        2488
                                                              00001100
 545 600110   2    Z(J-1)*100000-I.         3           1      1024            5       3313 0   0 0   0 0   0 0   0        2489
 546 710  0   2    Z(J-1)*100000-I.        19           3         1         1024          5 0   0 0   0 0   0 0   0        2490
 547 013 19   2    Z(J-1)*100000-I.        19           3         1         1024          5 0   0 0   0 0   0 0   0        2491
```

```
                                                                00010011
 548 042  2  2   Z(J-1)*100000-I.      19         3              1        1024          5 0   0 0   0 0   0 0     0        2492
 549 700  0  2   Z(J-1)*100000-I.       0         3              1        1024          5 0   0 0   0 0   0 0     0        2493
 550 013 32  2   Z(J-1)*100000-I.       3         1           1024           5       3313 0   0 0   0 0   0 0     0        2494
                                                                00100000
.....
                                                                01010000
*************** (Y*Y)*SET Z(I+1)=I+1.                                                             *****                     2506
 808 420244  1                  (      36         1           1024           5       3313 0   0 0   0 0   0 0     0        2523
 244 410214  3                  (     809        36              1        1024          5 0   0 0   0 0   0 0     0        2524
.....
                                                                01100010
                                                                00010011
                                                                11010010
                                                                01000011
        COMPILE   19.0:   LKBR1  210    Y
                                                                11101000
                                                                00001101
                                                                01000100
        COMPILE   19.1:   LIB        13
 218 001229  1                 (Y*      0  13631488            245         809         36 0   0 0   0 0   0 1 210        2586
 219 420192  2                 (Y*    229         0       13631488         245        809 0   0 0   0 0   0 1 210        2587
.....
 309 600180  3                (Y*Y    210        13            158         193        220 0   0 0   0 0   0 1 210        2620
 310 011  0  3                (Y*Y    210       210             13         158        193 0   0 0   0 0   0 1 210        2621
 311 042  4  3                (Y*Y    210        13            158         193        220 0   0 0   0 0   0 1 210        2622
 312 311  0  3                (Y*Y      0        13            158         193        220 0   0 0   0 0   0 1 210        2623
 314 710  0  3                (Y*Y     13       158            193         220        229 0   0 0   0 0   0 1 210        2624
 315 602 13  3                (Y*Y     13       158            193         220        229 0   0 0   0 0   0 1 210        2625
 316 712  0  3                (Y*Y     13       158            193         220        229 0   0 0   0 0   0 2 210        2626
 158 500162  3                (Y*Y     13       193            220         229          0 0   0 0   0 0   0 2 210        2627
.....
 220 101173  2               (Y*Y)      0  13631488            229           0   13631488 0   0 0   0 0   0 2 210        2635
 221 100144  1               (Y*Y)      0  13631488            229           0   13631488 0   0 0   0 0   0 2 210        2636
 223 001  0  1               (Y*Y)      0  13631488            229           0   13631488 0   0 0   0 0   0 2 210        2637
 224 711164  2               (Y*Y)      0         0       13631488         229          0 0   0 0   0 0   0 2 210        2638
                                                                11101101
                                                                00000000
                                                                10100100
        COMPILE   19.2:   LSR         0
 225 401 27  2               (Y*Y)      0  13631488            229           0   13631488 0   0 0   0 0   0 2 210        2639
.....
 285 702  0  3               (Y*Y)    226         0       13631488         229          0 0   0 0   0 0   0 2 210        2642
 226 650  0  2               (Y*Y)      0  13631488            229           0   13631488 0   0 0   0 0   0 2 210        2643
 227 750  0  2               (Y*Y) 13631488       0       13631488         229          0 0   0 0   0 0   0 2 210        2644
 228 020236  2               (Y*Y) 13631488       0       13631488         229          0 0   0 0   0 0   0 2 210        2645
                                                                11101110
                                                                00000000
                                                                00101111
        COMPILE   19.3:   MOD3        0
                                                                11101101
                                                                00000000
                                                                11011101
        COMPILE   20.0:   TRA1        0
 229 310  1  2               (Y*Y)      0  13631488            229           0   13631488 0   0 0   0 0   0 1 210        2647
 231 720  0  2               (Y*Y) 13631488     229              0    13631488        245 0   0 0   0 0   0 1 210        2648
 232 741229  2               (Y*Y) 13631488     229              0    13631488        245 0   0 0   0 0   0 1 210        2649
                                                                11100000
                                                                00000000
                                                                00101111
        COMPILE   20.1:   MOD3        0
                                                                11101101
                                                                00000000
                                                                11100101
        COMPILE   20.2:   MUL1        0
 233 001255  2               (Y*Y)    245       809             36           1       1024 0   0 0   0 0   0 0 210        2650
 234 001  2  2               (Y*Y)    255       245            809          36          1 0   0 0   0 0   0 0 210        2651
 235 722  0  2               (Y*Y)      2       255            245         809         36 0   0 0   0 0   0 0 210        2652
 246 700  0  3               (Y*Y)      2       255            809          36          1 0   0 0   0 0   0 0 210        2653
 247 021  6  3               (Y*Y)    255       809             36           1       1024 0   0 0   0 0   0 0 210        2654
 248 001  1  3               (Y*Y)    809        36              1        1024          5 0   0 0   0 0   0 0 210        2656
 249 611105  3               (Y*Y)      1       809             36           1       1024 0   0 0   0 0   0 0 210        2657
.....
 254 401 35  3               (Y*Y)    809        36              1        1024          5 0   0 0   0 0   0 0 210        2660
.....
 255 702  0  3               (Y*Y)    809        36              1        1024          5 0   0 0   0 0   0 0 210        2664
 809 102142  1               (Y*Y)     36         1           1024           5       3313 0   0 0   0 0   0 0 210        2665
 810 401 42  1               (Y*Y)     36         1           1024           5       3313 0   0 0   0 0   0 0 210        2666
 298 001255  1               (Y*Y)    811        36              1        1024          5 0   0 0   0 0   0 0 210        2667
 299 611180  1               (Y*Y)    255       811             36           1       1024 0   0 0   0 0   0 0 210        2668
.....
```

```
812 701167  1                (Y*Y)          9          36          1        1024          5 0    0 0    0 1 255 0 210     2723
                                                                  11101011
                                                                  00001001
                                                                  10100111

        COMPILE  20.3:  TAIR      9
813 012   4  1                (Y*Y)          9          36          1        1024          5 0    0 0    0 1 255 0 210     2724
814 711251  2                (Y*Y)     589824          36          1        1024          5 0    0 0    0 1 255 0 210     2725
                                                                  11100100
                                                                  00000000
                                                                  00101011

        COMPILE  21.0:  MOD2      0
                                                                  11101001
                                                                  00000000
                                                                  11111011

        COMPILE  21.1:  LPOSR     0
815 702   0  2                (Y*Y)         36           1        1024          5       3313 0    0 0    0 0 255 0 210     2726
 36 500  14  2                (Y*Y)          1        1024           5  331327514676480    0 0    0 0 255 0 210     2727
.....
 39 002   1  2                (Y*Y)*         0           1        1024          5       3313 0    0 0    0 0 255 0 210     2746
.....
 64 501144  2                (Y*Y)*SET      1           1        1024          5       3313 0    0 0    0 0 255 0 210     2754
400 001217  2                (Y*Y)*SET      1           1        1024          5       3313 0    0 0    0 0 255 0 210     2755
401 400153  2                (Y*Y)*SET    217           1           1       1024          5 0    0 0    0 0 255 0 210     2756
.....
                                                                  11100100
                                                                  11010001
                                                                  01000011

        COMPILE  21.2:  LKBR1  209   Z
                                                                  11101011
                                                                  00000101
                                                                  01000100

        COMPILE  21.3:  LIB       5
167 410153  3                (Y*Y)*SET Z(         5242880         402         217           1          1 0    0 1 209 0 255 0 210     2829
.....
169 611180  3             (Y*Y)*SET Z(I+          254     5242880         402         217           1 0    0 1 209 0 255 0 210     2835
170 401  44  3             (Y*Y)*SET Z(I+      5242880         402         217           1          1 0    0 1 209 0 255 0 210     2836
.....
172 401  27  3             (Y*Y)*SET Z(I+            1     5242880         402         217           1 1  254 1 209 0 255 0 210     2909
.....
173 600180  3             (Y*Y)*SET Z(I+            1     5242880         402         217           1 1  254 1 209 0 255 0 210     2913
174 711221  3             (Y*Y)*SET Z(I+          254           1     5242880         402         217 1  254 1 209 0 255 0 210     2914
                                                                  11100101
                                                                  11111110
                                                                  11011101

        COMPILE  22.0:    TRA1    254   I
175 701167  3             (Y*Y)*SET Z(I+            1     5242880         402         217           1 1  254 1 209 0 255 0 210     2915
                                                                  11100001
                                                                  00000001
                                                                  10100111

        COMPILE  22.1:    TAIR      1
176 012   4  3             (Y*Y)*SET Z(I+            1     5242880         402         217           1 1  254 1 209 0 255 0 210     2916
177 011   0  3             (Y*Y)*SET Z(I+        65536     5242880         402         217           1 1  254 1 209 0 255 0 210     2917
178 100155  3             (Y*Y)*SET Z(I+      5308416         402         217           1          1 1  254 1 209 0 255 0 210     2918
179 500186  1             (Y*Y)*SET Z(I+      5308416         402         217           1          1 1  254 1 209 0 255 0 210     2919
186 420  77  1             (Y*Y)*SET Z(I+      5308416         402         402         217          1 1  254 1 209 0 255 0 210     2920
.....
187 700   0  1    (Y*Y)*SET Z(I+1)              1     5308416         402         217           1          1 1  254 1 209 0 255 0 210     2938
188 002   1  1    (Y*Y)*SET Z(I+1)        5308416         402         217           1          1 1  254 1 209 0 255 0 210     2939
189 102142  3    (Y*Y)*SET Z(I+1)        5308417         402         217           1          1 1  254 1 209 0 255 0 210     2940
190 003   1  3    (Y*Y)*SET Z(I+1)        5308417         402         217           1          1 1  254 1 209 0 255 0 210     2941
191 712   0  3    (Y*Y)*SET Z(I+1)        5308416         402         217           1          1 1  254 1 209 0 255 0 210     2942
402 501172  2    (Y*Y)*SET Z(I+1)        5308416         217           1           1       1024 1  254 1 209 0 255 0 210     2943
428 102147  2    (Y*Y)*SET Z(I+1)        5308416         217           1           1       1024 1  254 1 209 0 255 0 210     2944
429 420244  2    Y*Y)*SET Z(I+1)=        5308416         217           1           1       1024 1  254 1 209 0 255 0 210     2945
.....
                                                                  11101100
                                                                  11111110
                                                                  11011101

        COMPILE  22.2:    TRA1    254   I
251 501   0  2    Y)*SET Z(I+1)=I+            430     5308416         217           1          1 1  254 1 209 0 255 0 210     2967
256 401   7  2    Y)*SET Z(I+1)=I+            430     5308416         217           1          1 1  254 1 209 0 255 0 210     2968
263 420214  2    Y)*SET Z(I+1)=I+            257         430     5308416         217          1 1  254 1 209 0 255 0 210     2969
.....
194 410  68  2    )*SET Z(I+1)=I+1            215         264         257         430    5308416 1  254 1 209 0 255 0 210     2975
.....
196 400  68  2    )*SET Z(I+1)=I+1              1         215         264         257        430 1  254 1 209 0 255 0 210     2984
.....
198 001   1  2    *SET Z(I+1)=I+1.              1         215         264         257        430 1  254 1 209 0 255 0 210     2991
199 722   0  2    *SET Z(I+1)=I+1.              1           1         215         264        257 1  254 1 209 0 255 0 210     2992
.....
264 301   2  2    *SET Z(I+1)=I+1.              1           1         257         430    5308416 1  254 1 209 0 255 0 210     2997
```

```
  265 401 35  1    *SET Z(I+1)=I+1.          1          1        257        430    5308416 1 254 1 209 0 255 0 210     2998
.....
  266 700  0  2    *SET Z(I+1)=I+1.          1          1        257        430    5308416 1 254 1 209 0 255 0 210     3002
  267 021 16  2    *SET Z(I+1)=I+1.          1        257        430    5308416        217 1 254 1 209 0 255 0 210     3003
                                                                                 11100001
                                                                                 00000001
                                                                                 11010000

        COMPILE  22.3:   ADK      1
  268 001  1  2    *SET Z(I+1)=I+1.        257        430    5308416        217          1 1 254 1 209 0 255 0 210     3005
  269 611105  2    *SET Z(I+1)=I+1.          1        257        430    5308416        217 1 254 1 209 0 255 0 210     3006
  270 702  0  2    *SET Z(I+1)=I+1.        257        430    5308416        217          1 1 254 1 209 0 255 0 210     3007
  257 500250  2    *SET Z(I+1)=I+1.        430    5308416        217          1          1 1 254 1 209 0 255 0 210     3008
.....
  430 630  0  2    *SET Z(I+1)=I+1.    5308416        217          1          1       1024 1 254 1 209 0 255 0 210     3016
  431 310  1  2    *SET Z(I+1)=I+1.          1    5308416        217          1          1 1 254 1 209 0 255 0 210     3017
  432 040 71  2    *SET Z(I+1)=I+1.    5308416        217          1          1       1024 1 254 1 209 0 255 0 210     3018
                                                                                 11101100
                                                                                 00000000
                                                                                 00100111

        COMPILE  23.0:   MOD1     0
                                                                                 11100101
                                                                                 00000000
                                                                                 00100011

        COMPILE  23.1:   MODO     0
                                                                                 11100001
                                                                                 00000000
                                                                                 01000111

        COMPILE  23.2:   PROT1    0
  433 720  0  2    *SET Z(I+1)=I+1.    5308416        217          1          1       1024 1 254 1 209 0 255 0 210     3019
  434 731217  2    *SET Z(I+1)=I+1.    5308416        217          1          1       1024 1 254 1 209 0 255 0 210     3020
                                                                                 11100011
                                                                                 00000000
                                                                                 00100111

        COMPILE  23.3:   MOD1     0
                                                                                 11100101
                                                                                 00000000
                                                                                 00100011

        COMPILE  24.0:   MODO     0
                                                                                 11100001
                                                                                 00000000
                                                                                 11011001

        COMPILE  24.1:   TRM1     0
  435 500  3  2    *SET Z(I+1)=I+1.          1       1024          5  331327514676480 254 0 209 0 255 0 210     3021
.....
                                                                                 01010100
**************** UNLESS(Q(Y(Y(N)+2))=N*2/10-1)*SET CCCCCCDD=L.                                          *****          3028
   67 501236  1            UNLESS          0          1       1024          5       3313 0 254 0 209 0 255 0 210     3054
  492 002  8  1            UNLESS          0          1       1024          5       3313 0 254 0 209 0 255 0 210     3055
  493 421189  2            UNLESS          8          1       1024          5       3313 0 254 0 209 0 255 0 210     3056
  445 101174  2            UNLESS        494          8          1       1024          5 0 254 0 209 0 255 0 210     3057
  447 421189  1           UNLESS(        494          8          1       1024          5 0 254 0 209 0 255 0 210     3058
  445 101174  3           UNLESS(        448        494          8          1       1024 0 254 0 209 0 255 0 210     3059
  446 501194  2         UNLESS(Q         448        494          8          1       1024 0 254 0 209 0 255 0 210     3060
  450 410244  2         UNLESS(Q         448        494          8          1       1024 0 254 0 209 0 255 0 210     3061
.....
  330 501 78  2      UNLESS(Q(Y(Y(N          1        158        168   13631488        168 0 254 0 209 0 255 2 210     3227
.....
                                                                                 01101010
                                                                                 00011000
                                                                                 11001110
                                                                                 01000011

        COMPILE  24.2:   LKBR1  206    N
                                                                                 11100110
                                                                                 00000001
                                                                                 01000100

        COMPILE  24.3:   LIB      1
  331 002  4  3      UNLESS(Q(Y(Y(N)          1        171   13631488        168   13631488 1 206 0 209 0 255 2 210     3312
  332 303 17  3      UNLESS(Q(Y(Y(N)          5        171   13631488        168   13631488 1 206 0 209 0 255 2 210     3313
  333 501 71  3      UNLESS(Q(Y(Y(N)          5        171   13631488        168   13631488 1 206 0 209 0 255 2 210     3314
.....
  330 501 78  3      UNLESS(Q(Y(Y(N)          5        171   13631488        168   13631488 1 206 0 209 0 255 2 210     3318
.....
                                                                                 11100001
                                                                                 00000000
                                                                                 00100011

        COMPILE  25.0:   MODO     0
                                                                                 11100001
                                                                                 00000000
                                                                                 11011101

        COMPILE  25.1:   TRA1     0
                                                                                 11100000
```

```
                                                         00000101
                                                         10100111
          COMPILE   25.2:   TAIR      5
 180 101151   3      UNLESS(Q(Y(Y(N)  13959168       168 13631488       168        241 0 206 1**** 0 255 2 210      3336
 181 500189   2      UNLESS(Q(Y(Y(N)  13959168       168 13631488       168        241 0 206 1**** 0 255 2 210      3337
.....
 313 501 45   1      UNLESS(Q(Y(Y(N)         9       171 13631488       168        241 0 206 1**** 0 255 2 210      3368
.....
                                                         11101000
                                                         00000000
                                                         00101111
          COMPILE   25.3:   MOD3      0
                                                         11101101
                                                         00000000
                                                         00100111
          COMPILE   26.0:   MOD1      0
                                                         11100101
                                                         11111111
                                                         11011101
          COMPILE   26.1:   TRA1    255
                                                         11100000
                                                         00000001
                                                         10100111
          COMPILE   26.2:   TAIR      1
 179 500186   2     UNLESS(Q(Y(Y(N)+  13697024       168      241       193        215 1**** 0**** 0 255 1 210      3433
 186 420 77   2     UNLESS(Q(Y(Y(N)+  13697024       168      241       193        215 1**** 0**** 0 255 1 210      3434
.....
 187 700  0   2     LESS(Q(Y(Y(N)+2)         2  13697024      168       241        193 1**** 0**** 0 255 1 210      3452
 188 002  2   2     LESS(Q(Y(Y(N)+2)  13697024       168      241       193        215 1**** 0**** 0 255 1 210      3453
.....
                                                         11101100
                                                         00000000
                                                         00101111
          COMPILE   26.3:   MOD3      0
                                                         11101101
                                                         00000000
                                                         00100011
          COMPILE   27.0:   MOD0      0
                                                         11100001
                                                         00000001
                                                         11011101
          COMPILE   27.1:   TRA1      1
                                                         11100001
                                                         00000101
                                                         10100111
          COMPILE   27.2:   TAIR      5
 181 500189   3     ESS(Q(Y(Y(N)+2))    327921       193      215       245        451 0**** 1**** 0 255 0 210      3552
.....
                                                         11101000
                                                         00000000
                                                         00100111
          COMPILE   27.3:   MOD1      0
                                                         11100101
                                                         11110000
                                                         11011101
          COMPILE   28.0:   TRA1    240   A
 452 101147   2     SS(Q(Y(Y(N)+2))=       448       494        8         1       1024 0**** 0**** 0 255 0 210      3575
 454 401 18   2     SS(Q(Y(Y(N)+2))=       448       494        8         1       1024 0**** 0**** 0 255 0 210      3576
 274 420214   3     SS(Q(Y(Y(N)+2))=       455       448      494         8          1 0**** 0**** 0 255 0 210      3577
.....
                                                         11101111
                                                         11001110
                                                         01000011
          COMPILE   28.1:   LKBR1   206   N
                                                         11100101
                                                         00000001
                                                         01000100
          COMPILE   28.2:   LIB       1
 218 001229   2     (Q(Y(Y(N)+2))=N*         0   1048576      275       455        448 1 206 0**** 0 255 0 210      3670
 219 420192   3     (Q(Y(Y(N)+2))=N*       229         0  1048576       275        455 1 206 0**** 0 255 0 210      3671
.....
 194 410 68   3     Q(Y(Y(N)+2))=N*2       220       229        0   1048576        275 1 206 0**** 0 255 0 210      3676
.....
 196 400 68   3     Q(Y(Y(N)+2))=N*2         2       220      229         0    1048576 1 206 0**** 0 255 0 210      3685
.....
 198 001  1   3     (Y(Y(N)+2))=N*2/         2       220      229         0    1048576 1 206 0**** 0 255 0 210      3692
 199 722  0   3     (Y(Y(N)+2))=N*2/         1         2      220       229          0 1 206 0**** 0 255 0 210      3693
 220 101173   3     (Y(Y(N)+2))=N*2/         1         2      229         0    1048576 1 206 0**** 0 255 0 210      3694
 221 100144   2     (Y(Y(N)+2))=N*2/         1         2      229         0    1048576 1 206 0**** 0 255 0 210      3695
 222 410208   2     (Y(Y(N)+2))=N*2/         1         2      229         0    1048576 1 206 0**** 0 255 0 210      3696
 208 102129   2     (Y(Y(N)+2))=N*2/       223         1        2       229          0 1 206 0**** 0 255 0 210      3697
```

```
  209 001   0  2    Y(Y(N)+2))=N*2/1          223          1          2          229          0 1 206 0**** 0 255 0 210     3698
.....
  211 712   0  2    Y(N)+2))=N*2/10-            1        223          1            2        229 1 206 0**** 0 255 0 210     3703
  224 711164 3     Y(N)+2))=N*2/10-            1          1          2          229          0 1 206 0**** 0 255 0 210     3704
                                                                                                  11100001
                                                                                                  00000001
                                                                                                  10100100

        COMPILE  28.3:   LSR      1
  225 401  27  3     Y(N)+2))=N*2/10-            1          2        229            0  1048576 1 206 0**** 0 255 0 210     3705
.....
  286 001255 2     Y(N)+2))=N*2/10-          226          1          2          229          0 1 206 0**** 0 255 0 210     3708
  287 711217 2     Y(N)+2))=N*2/10-          255        226          1            2        229 1 206 0**** 0 255 0 210     3709
                                                                                                  11101111
                                                                                                  11111111
                                                                                                  11011001

        COMPILE  29.0:   TRM1   255
  288 001  2   2     Y(N)+2))=N*2/10-          226          1          2          229          0 1 206 0**** 0 255 0 210     3710
  289 611105 2     Y(N)+2))=N*2/10-            2        226          1            2        229 1 206 0**** 0 255 0 210     3711
  290 702   0  2     Y(N)+2))=N*2/10-          226          1          2          229          0 1 206 0**** 0 255 0 210     3712
  226 650   0  3     Y(N)+2))=N*2/10-            1          2        229            0  1048576 1 206 0**** 0 255 0 210     3713
  227 750   0  3     Y(N)+2))=N*2/10-      1048576          1          2          229          0 1 206 0**** 0 255 0 210     3714
  228 020236 3     Y(N)+2))=N*2/10-      1048576          1          2          229          0 1 206 0**** 0 255 0 210     3715
                                                                                                  11100100
                                                                                                  00000000
                                                                                                  00100011

        COMPILE  29.1:   MUDO     0
                                                                                                  11100001
                                                                                                  00000000
                                                                                                  11011101

        COMPILE  29.2:   TRA1     0
  229 310  1   3     Y(N)+2))=N*2/10-            1          2        229            0  1048576 0 206 0**** 0 255 0 210     3717
  230 402  46  1     Y(N)+2))=N*2/10-            2        229          0      1048576        275 0 206 0**** 0 255 0 210     3718
  558 600130 3     Y(N)+2))=N*2/10-          231          2        229            0  1048576 0 206 0**** 0 255 0 210     3719
  559 003   1  3     Y(N)+2))=N*2/10-          202        231          2          229          0 0 206 0**** 0 255 0 210     3720
  560 601130 3     Y(N)+2))=N*2/10-          201        231          2          229          0 0 206 0**** 0 255 0 210     3721
  561 002   1  3     Y(N)+2))=N*2/10-          201        231          2          229          0 0 206 0**** 0 255 0 210     3722
  562 013161 3     Y(N)+2))=N*2/10-          202        231          2          229          0 0 206 0**** 0 255 0 210     3723
                                                                                                  01010000
                                                                                                  10100001

  563 041  10  3     Y(N)+2))=N*2/10-          202        231          2          229          0 0 206 0**** 0 255 0 210     3724
        COMPILE CONSTANT IN LOCATION 1.202      0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  2
  564 710   0  3     Y(N)+2))=N*2/10-          202        231          2          229          0 0 206 0**** 0 255 0 210     3725
  565 013202 3     Y(N)+2))=N*2/10-          202        231          2          229          0 0 206 0**** 0 255 0 210     3726
                                                                                                  11001010

  566 633   0  3     Y(N)+2))=N*2/10-          202        231          2          229          0 0 206 0**** 0 255 0 210     3727
  567 611115 3     Y(N)+2))=N*2/10-            2        231        202          229          0 0 206 0**** 0 255 0 210     3728
  568 001   0  3     Y(N)+2))=N*2/10-          231        202        229            0  1048576 0 206 0**** 0 255 0 210     3729
.....
                                                                                                  00000010
                                                                                                  00000000
                                                                                                  00000000
                                                                                                  00000000
                                                                                                  00000000
                                                                                                  00000000
                                                                                                  00000000
                                                                                                  00000000

  577 512  39  3     Y(N)+2))=N*2/10-            8        231        202          229          0 0 206 0**** 0 255 0 210     3793
.....
                                                                                                  01010101

  231 720   0  3     Y(N)+2))=N*2/10-          202        229          0      1048576        275 0 206 0**** 0 255 0 210     3799
  232 741229 3     Y(N)+2))=N*2/10-          202        229          0      1048576        275 0 206 0**** 0 255 0 210     3800
                                                                                                  01101110
                                                                                                  00011101
                                                                                                  11001010
                                                                                                  11100101

        COMPILE  29.3:   MUL1   202
  233 001255 3     Y(N)+2))=N*2/10-          275        455        448          494          8 0 206 0**** 0 255 0 210     3801
  234 001  2   3     Y(N)+2))=N*2/10-          255        275        455          448        494 0 206 0**** 0 255 0 210     3802
  235 722   0  3     Y(N)+2))=N*2/10-            2        255        275          455        448 0 206 0**** 0 255 0 210     3803
  275 301   2  3     Y(N)+2))=N*2/10-            2        255        455          448        494 0 206 0**** 0 255 0 210     3804
  277 700   0  3     Y(N)+2))=N*2/10-            2        255        455          448        494 0 206 0**** 0 255 0 210     3805
  278 021  26  3     Y(N)+2))=N*2/10-          255        455        448          494          8 0 206 0**** 0 255 0 210     3806
                                                                                                  11101111
                                                                                                  11111111
                                                                                                  11101011

        COMPILE  30.0:   SUM1   255
  279 702   0  3     Y(N)+2))=N*2/10-          455        448        494            8          1 0 206 0**** 0 255 0 210     3808
  455 100155 2     Y(N)+2))=N*2/10-          448        494          8            1       1024 0 206 0**** 0 255 0 210     3809
  457 101151 2     Y(N)+2))=N*2/10-          448        494          8            1       1024 0 206 0**** 0 255 0 210     3810
  459 401   7  1     Y(N)+2))=N*2/10-          448        494          8            1       1024 0 206 0**** 0 255 0 210     3811
  263 420214 3     Y(N)+2))=N*2/10-          460        448        494            8          1 0 206 0**** 0 255 0 210     3812
```

```
..:.:
 264 301  2  3    N)+2))=N*2/10-1)          1          1        460        448        494 0 206 0**** 0 255 0 210      3840
 265 401 35  2    N)+2))=N*2/10-1)          1          1        460        448        494 0 206 0**** 0 255 0 210      3841
..:.:
 294 001255  1    N)+2))=N*2/10-1)        266          1          1        460        448 0 206 0**** 0 255 0 210      3844
 295 711221  1    N)+2))=N*2/10-1)        255        266          1          1        460 0 206 0**** 0 255 0 210      3845
                                                                  11100101
                                                                  11111111
                                                                  11011101

        COMPILE  30.1:    TRA1    255
 296 001   1  1    N)+2))=N*2/10-1)        266          1          1        460        448 0 206 0**** 0 255 0 210      3846
 297 501  33  1    N)+2))=N*2/10-1)          1        266          1          1        460 0 206 0**** 0 255 0 210      3847
 289 611105  3    N)+2))=N*2/10-1)          1        266          1          1        460 0 206 0**** 0 255 0 210      3848
 290 702   0  3    N)+2))=N*2/10-1)        266          1          1        460        448 0 206 0**** 0 255 0 210      3849
 266 700   0  3    N)+2))=N*2/10-1)          1          1        460        448        494 0 206 0**** 0 255 0 210      3850
 267 021  16  3    N)+2))=N*2/10-1)          1        460        448        494          8 0 206 0**** 0 255 0 210      3851
                                                                  11100000
                                                                  00000001
                                                                  11010000

        COMPILE  30.2:    ADK       1
 268 001   1  3    N)+2))=N*2/10-1)        460        448        494          8          1 0 206 0**** 0 255 0 210      3853
 269 611105  3    N)+2))=N*2/10-1)          1        460        448        494          8 0 206 0**** 0 255 0 210      3854
 270 702   0  3    N)+2))=N*2/10-1)        460        448        494          8          1 0 206 0**** 0 255 0 210      3855
 460 501199  1    N)+2))=N*2/10-1)        448        494          8          1       1024 0 206 0**** 0 255 0 210      3856
 455 100155  3    N)+2))=N*2/10-1)        448        494          8          1       1024 0 206 0**** 0 255 0 210      3857
 457 101151  3    N)+2))=N*2/10-1)        448        494          8          1       1024 0 206 0**** 0 255 0 210      3858
 458 501205  2    N)+2))=N*2/10-1)        448        494          8          1       1024 0 206 0**** 0 255 0 210      3859
 461 401 35  2    N)+2))=N*2/10-1)        448        494          8          1       1024 0 206 0**** 0 255 0 210      3860
..:.:
 462 001  17  2    N)+2))=N*2/10-1)        448        494          8          1       1024 0 206 0**** 0 255 0 210      3864
 463 001   1  2    N)+2))=N*2/10-1)         17        448        494          8          1 0 206 0**** 0 255 0 210      3865
 464 722   0  2    N)+2))=N*2/10-1)          1         17        448        494          8 0 206 0**** 0 255 0 210      3866
 448 102142  1    N)+2))=N*2/10-1)          1         17        494          8          1 0 206 0**** 0 255 0 210      3867
 449 722   0  1    N)+2))=N*2/10-1)          1         17        494          8          1 0 206 0**** 0 255 0 210      3868
 494 101148  2    N)+2))=N*2/10-1)          1         17          8          1       1024 0 206 0**** 0 255 0 210      3869
 495 501240  1    )+2))=N*2/10-1)*          1         17          8          1       1024 0 206 0**** 0 255 0 210      3870
 496 100  10  2    )+2))=N*2/10-1)*          1         17          8          1       1024 0 206 0**** 0 255 0 210      3871
 498 401255  2    )+2))=N*2/10-1)*          1         17          8          1       1024 0 206 0**** 0 255 0 210      3872
 511 611115  2    )+2))=N*2/10-1)*        499          1         17          8          1 0 206 0**** 0 255 0 210      3873
 512 630   0  2    )+2))=N*2/10-1)*          1         17          8          1       1024 0 206 0**** 0 255 0 210      3874
 513 210   8  2    )+2))=N*2/10-1)*          8          1         17          8          1 0 206 0**** 0 255 0 210      3875
 514 002   4  1    )+2))=N*2/10-1)*          1         17          8          1       1024 0 206 0**** 0 255 0 210      3876
 515 700   0  2    )+2))=N*2/10-1)*          5         17          8          1       1024 0 206 0**** 0 255 0 210      3877
 516 721   5  2    )+2))=N*2/10-1)*         17          8          1       1024          5 0 206 0**** 0 255 0 210      3878
                                                                  11101100
                                                                  00010001
                                                                  00000101

        COMPILE  30.3:    EXL      17
 517 600110  2    )+2))=N*2/10-1)*          1       1024          5 331327514676480 206 0**** 0 255 0 210      3879
 518 001   2  2    )+2))=N*2/10-1)*         31          1       1024          5       3313 0 206 0**** 0 255 0 210      3880
 519 701   0  2    )+2))=N*2/10-1)*          2         31          1       1024          5 0 206 0**** 0 255 0 210      3881
                                                                  11100101
                                                                  00000010
                                                                  00000000

        COMPILE  31.0:    STOP      2
 520 600115  2    )+2))=N*2/10-1)*          2         31          1       1024          5 0 206 0**** 0 255 0 210      3882
 521 702   0  2    )+2))=N*2/10-1)*        499          2         31          1       1024 0 206 0**** 0 255 0 210      3883
 499 500  14  2    )+2))=N*2/10-1)*          2         31          1       1024          5 0 206 0**** 0 255 0 210      3884
...:.
  39 002   1  3    )+2))=N*2/10-1)*          0          2         31          1       1024 0 206 0**** 0 255 0 210      3903
..:.:
  64 501144  3    ))=N*2/10-1)*SET          1          2         31          1       1024 0 206 0**** 0 255 0 210      3911
 400 001217  3    ))=N*2/10-1)*SET          1          2         31          1       1024 0 206 0**** 0 255 0 210      3912
 401 400153  3    ))=N*2/10-1)*SET        217          1          2         31          1 0 206 0**** 0 255 0 210      3913
..:.:
 403 421  91  1    -1)*SET CCCCCCDD        217          1          2         31          1 0 206 0**** 0 255 0 210      3917
 347 001   1  1    -1)*SET CCCCCCDD        404        217          1          2         31 0 206 0**** 0 255 0 210      3918
 348 100102  1    -1)*SET CCCCCCDD          1        404        217          1          2 0 206 0**** 0 255 0 210      3919
 350 111103  1    -1)*SET CCCCCCDD          1        404        217          1          2 0 206 0**** 0 255 0 210      3920
 352 600170  1    -1)*SET CCCCCCDD        404        217          1          2         31 0 206 0**** 0 255 0 210      3921
 353 623   0  1    -1)*SET CCCCCCDD          4        404        217          1          2 0 206 0**** 0 255 0 210      3922
 354 500164  1    -1)*SET CCCCCCDD        404          4        217          1          2 0 206 0**** 0 255 0 210      3923
..:.:
 404 102147  1    1)*SET CCCCCCDD=        217          4        217          1          2 0 206 0**** 0 255 0 210      3927
 405 421  99  1    1)*SET CCCCCCDD=        217          4        217          1          2 0 206 0**** 0 255 0 210      3928
 355 401  91  1    1)*SET CCCCCCDD=        406        217          4        217          1 0 206 0**** 0 255 0 210      3929
 347 001   1  2    1)*SET CCCCCCDD=        356        406        217          4        217 0 206 0**** 0 255 0 210      3930
 348 100102  2    1)*SET CCCCCCDD=          1        356        406        217          4 0 206 0**** 0 255 0 210      3931
 350 111103  2    )*SET CCCCCCDD=L          1        356        406        217          4 0 206 0**** 0 255 0 210      3932
 351 703   0  1    )*SET CCCCCCDD=L        356        406        217          4        217 0 206 0**** 0 255 0 210      3933
 357 100105  1    )*SET CCCCCCDD=L        406        217          4        217          1 0 206 0**** 0 255 0 210      3934
```

```
358 501141   1    )*SET CCCCCCDD=L          406          217            4          217          1 0 206 0**** 0 255 0 210     3935
397 001255   1    )*SET CCCCCCDD=L          406          217            4          217          1 0 206 0**** 0 255 0 210     3936
398 623   0  1    )*SET CCCCCCDD=L          255          406          217            4        217 0 206 0**** 0 255 0 210     3937
399 500157   1    )*SET CCCCCCDD=L          406          255          217            4        217 0 206 0**** 0 255 0 210     3938
.....
                                                                                  11100010
                                                                                  11010000
                                                                                  01000011

        COMPILE  31.1:   LKBR1  208   L

                                                                                  11101010
                                                                                  00000001
                                                                                  01000100

        COMPILE  31.2:   LIB      1
406 620   0  1    *SET CCCCCCDD=L.    1048576          255          217            4        217 1 208 0**** 0 255 0 210     4023
407 750   0  1    *SET CCCCCCDD=L.        255      1048576          255          217          4 1 208 0**** 0 255 0 210     4024
408 200   4  1    *SET CCCCCCDD=L.        255      1048576          255          217          4 1 208 0**** 0 255 0 210     4025
409 653   0  1    *SET CCCCCCDD=L.        255      1048576          255          217          4 1 208 0**** 0 255 0 210     4026
410 003   1  1    *SET CCCCCCDD=L.          4      1048576          255          217        255 1 208 0**** 0 255 0 210     4027
411 601115   1    *SET CCCCCCDD=L.          3      1048576          255          217        255 1 208 0**** 0 255 0 210     4028
412 310   0  1    *SET CCCCCCDD=L.          3      1048576          255          217        255 1 208 0**** 0 255 0 210     4029
414 040221   1    *SET CCCCCCDD=L.    1048576          255          217          255        217 1 208 0**** 0 255 0 210     4030
                                                                                  11100001
                                                                                  00000000
                                                                                  00100011

        COMPILE  31.3:   MODO     0

                                                                                  11100001
                                                                                  00000000
                                                                                  11011101

        COMPILE  32.0:   TRA1     0
415 612   0  1    *SET CCCCCCDD=L.    1048576          255          217          255        217 1 208 0**** 0 255 0 210     4031
416 630   0  1    *SET CCCCCCDD=L.    1048577          255          217          255        217 1 208 0**** 0 255 0 210     4032
417 670   0  1    *SET CCCCCCDD=L.        217      1048577          255          217        255 1 208 0**** 0 255 0 210     4033
418 310   1  1    *SET CCCCCCDD=L.          1          217      1048577          255        217 1 208 0**** 0 255 0 210     4034
419 040  71  1    *SET CCCCCCDD=L.        217      1048577          255          217        255 1 208 0**** 0 255 0 210     4035
                                                                                  11100000
                                                                                  11011001
                                                                                  01000111

        COMPILE  32.1:   PROT1  217   CCCCCC
420 040217   1    *SET CCCCCCDD=L.        217      1048577          255          217        255 1 208 0**** 0 255 0 210     4036
                                                                                  11100111
                                                                                  11011001
                                                                                  11011001

        COMPILE  32.2:   TRM1   217   CCCCCC
421 511166   1    *SET CCCCCCDD=L.          217    1048577          255          217        255 1 208 0**** 0 255 0 210     4037
422 632   0  1    *SET CCCCCCDD=L.    1048577          255          217          255        217 1 208 0**** 0 255 0 210     4038
423 600115   1    *SET CCCCCCDD=L.    1048577          255          218          255        217 1 208 0**** 0 255 0 210     4039
424 501154   1    *SET CCCCCCDD=L.          3      1048577          255          218        255 1 208 0**** 0 255 0 210     4040
410 003   1  2    *SET CCCCCCDD=L.          3      1048577          255          218        255 1 208 0**** 0 255 0 210     4041
411 601115   2    *SET CCCCCCDD=L.          2      1048577          255          218        255 1 208 0**** 0 255 0 210     4042
412 310   0  2    *SET CCCCCCDD=L.          2      1048577          255          218        255 1 208 0**** 0 255 0 210     4043
414 040221   2    *SET CCCCCCDD=L.    1048577          255          218          255        217 1 208 0**** 0 255 0 210     4044
                                                                                  11100000
                                                                                  00000000
                                                                                  00100011

        COMPILE  32.3:   MODO     0

                                                                                  11100001
                                                                                  00000001
                                                                                  11011101

        COMPILE  33.0:   TRA1     1
415 612   0  2    *SET CCCCCCDD=L.    1048577          255          218          255        217 1 208 0**** 0 255 0 210     4045
416 630   0  2    *SET CCCCCCDD=L.    1048578          255          218          255        217 1 208 0**** 0 255 0 210     4046
417 670   0  2    *SET CCCCCCDD=L.        218      1048578          255          218        255 1 208 0**** 0 255 0 210     4047
418 310   1  2    *SET CCCCCCDD=L.          1          218      1048578          255        218 1 208 0**** 0 255 0 210     4048
419 040  71  2    *SET CCCCCCDD=L.        218      1048578          255          218        255 1 208 0**** 0 255 0 210     4049
                                                                                  11100001
                                                                                  11011010
                                                                                  01000111

        COMPILE  33.1:   PROT1  218
420 040217   2    *SET CCCCCCDD=L.        218      1048578          255          218        255 1 208 0**** 0 255 0 210     4050
                                                                                  11100100
                                                                                  11011010
                                                                                  11011001

        COMPILE  33.2:   TRM1   218
421 511166   2    *SET CCCCCCDD=L.          218    1048578          255          218        255 1 208 0**** 0 255 0 210     4051
422 632   0  2    *SET CCCCCCDD=L.    1048578          255          218          255        217 1 208 0**** 0 255 0 210     4052
423 600115   2    *SET CCCCCCDD=L.    1048578          255          219          255        217 1 208 0**** 0 255 0 210     4053
424 501154   2    *SET CCCCCCDD=L.          2      1048578          255          219        255 1 208 0**** 0 255 0 210     4054
410 003   1  3    *SET CCCCCCDD=L.          2      1048578          255          219        255 1 208 0**** 0 255 0 210     4055
411 601115   3    *SET CCCCCCDD=L.          1      1048578          255          219        255 1 208 0**** 0 255 0 210     4056
412 310   0  3    *SET CCCCCCDD=L.          1      1048578          255          219        255 1 208 0**** 0 255 0 210     4057
414 040221   3    *SET CCCCCCDD=L.    1048578          255          219          255        217 1 208 0**** 0 255 0 210     4058
```

```
                                                          11100011
                                                          00000000
                                                          00100011
      COMPILE  33.3:   MODO      0
                                                          11100001
                                                          00000010
                                                          11011101
      COMPILE  34.0:   TRA1      2
415 612  0  3  *SET CCCCCCDD=L.  1048578      255        219     255    217 1 208 0**** 0 255 0 210   4059
416 630  0  3  *SET CCCCCCDD=L.  1048579      255        219     255    217 1 208 0**** 0 255 0 210   4060
417 670  0  3  *SET CCCCCCDD=L.      219  1048579        255     219    255 1 208 0**** 0 255 0 210   4061
418 310  1  3  *SET CCCCCCDD=L.        1      219    1048579     255    219 1 208 0**** 0 255 0 210   4062
419 040 71  3  *SET CCCCCCDD=L.      219  1048579        255     219    255 1 208 0**** 0 255 0 210   4063
                                                          11100010
                                                          11011011
                                                          01000111
      COMPILE  34.1:   PROT1   219
420 040217  3  *SET CCCCCCDD=L.      219  1048579        255     219    255 1 208 0**** 0 255 0 210   4064
                                                          11100101
                                                          11011011
                                                          11011001
      COMPILE  34.2:   TRM1    219
421 511166  3  *SET CCCCCCDD=L.      219  1048579        255     219    255 1 208 0**** 0 255 0 210   4065
422 632  0  3  *SET CCCCCCDD=L.  1048579      255        219     255    217 1 208 0**** 0 255 0 210   4066
423 600115  3  *SET CCCCCCDD=L.  1048579      255        220     255    217 1 208 0**** 0 255 0 210   4067
424 501154  3  *SET CCCCCCDD=L.        1  1048579        255     220    255 1 208 0**** 0 255 0 210   4068
.....
413 501169  1  *SET CCCCCCDD=L.  1048579      255        220     255    217 1 208 0**** 0 255 0 210   4072
425 721221  1  *SET CCCCCCDD=L.  1048579      255        220     255    217 1 208 0**** 0 255 0 210   4073
                                                          11100010
                                                          00000000
                                                          00100011
      COMPILE  34.3:   MODO      0
                                                          11100001
                                                          00000011
                                                          11011101
      COMPILE  35.0:   TRA1      3
426 623  0  1  *SET CCCCCCDD=L.      220      255        217       1      2 0 208 0**** 0 255 0 210   4074
427 511174  1  *SET CCCCCCDD=L.      255      220        217       1      2 0 208 0**** 0 255 0 210   4075
430 630  0  3  *SET CCCCCCDD=L.      220      217          1       2     31 0 208 0**** 0 255 0 210   4076
431 310  1  3  *SET CCCCCCDD=L.        1      220        217       1      2 0 208 0**** 0 255 0 210   4077
432 040 71  3  *SET CCCCCCDD=L.      220      217          1       2     31 0 208 0**** 0 255 0 210   4078
                                                          11100011
                                                          11011100
                                                          01000111
      COMPILE  35.1:   PROT1   220   CCCCCC
433 720  0  3  *SET CCCCCCDD=L.      220      217          1       2     31 0 208 0**** 0 255 0 210   4079
434 731217  3  *SET CCCCCCDD=L.      220      217          1       2     31 0 208 0**** 0 255 0 210   4080
                                                          11100010
                                                          11011100
                                                          11011001
      COMPILE  35.2:   TRM1    220   CCCCCC
435 500  3  3  *SET CCCCCCDD=L.        2       31          1    1024      5 0 208 0**** 0 255 0 210   4081
.....
  4 510  2  2  *SET CCCCCCDD=L.        2       31          1    1024      5 0 208 0**** 0 255 0 210   4083
  2 402 23  2  *SET CCCCCCDD=L.       31        1       1024       5   3313 0 208 0**** 0 255 0 210   4084
535 401 85  3  *SET CCCCCCDD=L.        3       31          1    1024      5 0 208 0**** 0 255 0 210   4085
.....
536 623  0  3  *SET CCCCCCDD=L.        3       31          1    1024      5 0   0 0    0 0    0 0   0   4092
537 042  2  3  *SET CCCCCCDD=L.       31        3          1    1024      5 0   0 0    0 0    0 0   0   4093
538 002 96  3  *SET CCCCCCDD=L.        0        3          1    1024      5 0   0 0    0 0    0 0   0   4094
539 710  0  3  *SET CCCCCCDD=L.       96        3          1    1024      5 0   0 0    0 0    0 0   0   4095
540 013 96  3  *SET CCCCCCDD=L.       96        3          1    1024      5 0   0 0    0 0    0 0   0   4096
                                                          01010101
                                                          01100000
541 041  6  3  *SET CCCCCCDD=L.       96        3          1    1024      5 0   0 0    0 0    0 0   0   4097
     FIXUP LOCATION  31.0
542 012  2  3  *SET CCCCCCDD=L.       96        3          1    1024      5 0   0 0    0 0    0 0   0   4098
543 700  0  3  *SET CCCCCCDD=L.    24607        3          1    1024      5 0   0 0    0 0    0 0   0   4099
544 013 31  3  *SET CCCCCCDD=L.        3        1       1024       5   3313 0   0 0    0 0    0 0   0   4100
                                                          00011111
545 600110  3  *SET CCCCCCDD=L.        3        1       1024       5   3313 0   0 0    0 0    0 0   0   4101
546 710  0  3  *SET CCCCCCDD=L.     3107        3          1    1024      5 0   0 0    0 0    0 0   0   4102
547 013 35  3  *SET CCCCCCDD=L.     3107        3          1    1024      5 0   0 0    0 0    0 0   0   4103
                                                          00100011
548 042  2  3  *SET CCCCCCDD=L.     3107        3          1    1024      5 0   0 0    0 0    0 0   0   4104
549 700  0  3  *SET CCCCCCDD=L.       12        3          1    1024      5 0   0 0    0 0    0 0   0   4105
550 013 44  3  *SET CCCCCCDD=L.        3        1       1024       5   3313 0   0 0    0 0    0 0   0   4106
                                                          00101100
.....
                                                          01010001
```

```
*************** *ADD X(I)-11 TO X(X(I)-11).                                                         *****          4118
  47 501180  1             *ADD            1          1       1024          5       3313 0    0 0    0 0   0 0    0        4146
 436 420244  1             *ADD            1          1       1024          5       3313 0    0 0    0 0   0 0    0        4147
.....
                                                              01101110
                                                              00100011
                                                              11010011
                                                              01000011
        COMPILE  35.3:   LKBR1  211   X
                                                              11100110
                                                              00001101
                                                              01000100
        COMPILE  36.0:   LIB     13
                                                              11101101
                                                              11111110
                                                              11011101
        COMPILE  36.1:   TRA1   254   I
                                                              11100001
                                                              00001001
                                                              10100111
        COMPILE  36.2:   TAIR     9
                                                              11100100
                                                              00000000
                                                              00101111
        COMPILE  36.3:   MOD3     0
                                                              11101101
                                                              00000000
                                                              00101011
        COMPILE  37.0:   MOD2     0
                                                              11101001
                                                              11111111
                                                              11011101
        COMPILE  37.1:   TRA1   255
 253 501  2  2          *ADD X(I)-       437          1          1       1024          5 0    0 0    0 0 254 0 211        4296
 258 401 18  2          *ADD X(I)-       437          1          1       1024          5 0    0 0    0 0 254 0 211        4297
.....
 197 500200  1       *ADD X(I)-11          1          1        215        275        259 0    0 0    0 0 254 0 211        4322
 200 623  0  1       *ADD X(I)-11          1          1        215        275        259 0    0 0    0 0 254 0 211        4323
 201 012  1  1       *ADD X(I)-11          1          1        215        275        259 0    0 0    0 0 254 0 211        4324
 202 011  0  1       *ADD X(I)-11         16          1        215        275        259 0    0 0    0 0 254 0 211        4325
 203 400 68  1       *ADD X(I)-11         17        215        275        259        437 0    0 0    0 0 254 0 211        4326
.....
 205 402 46  1    *ADD X(I)-11 TO         17        215        275        259        437 0    0 0    0 0 254 0 211        4332
.....
                                                              01010000
                                                              10100001
      COMPILE CONSTANT IN LOCATION 1.201      0  0  0  0  0  0  0  0  0  0  0  0  0  1  1
                                                              11001001
                                                              00010001
                                                              00000000
                                                              00000000
                                                              00000000
                                                              00000000
                                                              00000000
                                                              00000000
                                                              00000000
                                                              01010100
 276 401 35  3    *ADD X(I)-11 TO          0        201        259        437          1 0    0 0    0 0 254 0 211        4420
.....
                                                              01101010
                                                              00100101
                                                              11001001
                                                              11100011
        COMPILE  37.2:   SUA1   201
 259 500250  2    *ADD X(I)-11 TO        437          1          1       1024          5 0    0 0    0 0 254 0 211        4428
.....
 437 102 57  1    *ADD X(I)-11 TO          1          1       1024          5       3313 0    0 0    0 0 254 0 211        4436
 438 001233  1    *ADD X(I)-11 TO          1          1       1024          5       3313 0    0 0    0 0 254 0 211        4437
 439 420153  1    *ADD X(I)-11 TO        233          1          1       1024          5 0    0 0    0 0 254 0 211        4438
.....
 171 500176  1    (I)-11 TO X(X(I)         9   13631488        168   13631488        440 0    0 0    0 1 254 2 211        4560
.....
 286 001255  3    (I)-11 TO X(X(I)       173          5   13631488        440        233 0    0 1**** 1 254 2 211        4637
 287 711217  3    (I)-11 TO X(X(I)       255        173          5   13631488        440 0    0 1**** 1 254 2 211        4638
                                                              11100101
                                                              11111111
                                                              11011001
        COMPILE  37.3:   TRM1   255
 288 001  2  3    (I)-11 TO X(X(I)       173          5   13631488        440        233 0    0 1**** 1 254 2 211        4639
.....
                                                              11100100
```

```
                                                          00000000
                                                          00101111
      COMPILE  38.0:   MOD3     0
                                                          11101101
                                                          00000000
                                                          00101011
      COMPILE  38.1:   MOD2     0
                                                          11101001
                                                          11111111
                                                          11011101
      COMPILE  38.2:   TRA1   255
                                                          11100000
                                                          00000101
                                                          10100111
      COMPILE  38.3:   TAIR     5
 182 420 77   2   I)-11 TO X(X(I)-  13959168      440       233        1        1 0    0 1**** 0 254 1 211      4649
.....
 183 700  0   2   11 TO X(X(I)-11)        11 13959168       440      233        1 0    0 1**** 0 254 1 211      4681
 184 003 11   2   11 TO X(X(I)-11)  13959168      440       233        1        1 0    0 1**** 0 254 1 211      4682
 185 500189   2   11 TO X(X(I)-11)  13959413      440       233        1        1 0    0 1**** 0 254 1 211      4683
.....
 440 501174   1   11 TO X(X(I)-11)  13959412      233         1        1     1024 0    0 1**** 0 254 1 211      4687
.....
                                                          11101000
                                                          00000000
                                                          00101111
      COMPILE  39.0:   MOD3     0
                                                          11101101
                                                          00000000
                                                          00100111
      COMPILE  39.1:   MOD1     0
                                                          11100101
                                                          11110100
                                                          01000111
      COMPILE  39.2:   PROT1  244
                                                          11101000
                                                          00000000
                                                          00101111
      COMPILE  39.3:   MOD3     0
                                                          11101101
                                                          00000000
                                                          00100111
      COMPILE  40.0:   MOD1     0
                                                          11100101
                                                          11110100
                                                          11101001
      COMPILE  40.1:   ADM1   244
                                                          01011100
*************** SUBTRACT X/Y+2 FROM W.                                                  *****          4700
  65 501185   1           SUBTRACT          0        1      1024        5     3313 0    0 0**** 0 254 0 211      4726
 441 420244   1           SUBTRACT          0        1      1024        5     3313 0    0 0**** 0 254 0 211      4727
.....
 240 001237   2         SUBTRACT X/         0 13631488       245      442        0 0    0 0**** 0 254 1 211      4780
 241 500219   2         SUBTRACT X/       237        0  13631488      245      442 0    0 0**** 0 254 1 211      4781
.....
                                                          01101010
                                                          00101000
                                                          11010010
                                                          01000011
      COMPILE  40.2:   LKBR1  210   Y
                                                          11101000
                                                          00000001
                                                          01000100
      COMPILE  40.3:   LIB      1
 221 100144   3      SUBTRACT X/Y+          0  1048576       237        0 13631488 1 210 0**** 0 254 1 211      4870
 223 001  0   2      SUBTRACT X/Y+          0  1048576       237        0 13631488 1 210 0**** 0 254 1 211      4871
.....
                                                          11100001
                                                          00000000
                                                          10100100
      COMPILE  41.0:   LSR      0
                                                          11101110
                                                          00000000
                                                          00101111
      COMPILE  41.1:   MOD3     0
                                                          11101101
                                                          00000000
                                                          11011101
      COMPILE  41.2:   TRA1     0
                                                          11100000
                                                          00000000
```

```
                                                              00100011
          COMPILE  41.3:   MODO     0
                                                              11100001
                                                              00000000
                                                              11101101
          COMPILE  42.0:   DIV1     0
 251 501  0  3      SUBTRACT X/Y+        442        0          1         1024        5 0 210 0**** 0 254 0 211      4893
 256 401  7  3      SUBTRACT X/Y+        442        0          1         1024        5 0 210 0**** 0 254 0 211      4894
.....
 265 401 35  3    TRACT X/Y+2 FROM         1        2        257          442        0 0 210 0**** 0 254 0 211      4923
.....
                                                              11100011
                                                              00000010
                                                              11010000
          COMPILE  42.1:   ADK      2
 257 500250  3    TRACT X/Y+2 FROM       442        0          1         1024        5 0 210 0**** 0 254 0 211      4933
.....
 442 102 50  1    TRACT X/Y+2 FROM         0        1       1024            5     3313 0 210 0**** 0 254 0 211      4941
 443 001235  1    TRACT X/Y+2 FROM         0        1       1024            5     3313 0 210 0**** 0 254 0 211      4942
 444 501183  1    TRACT X/Y+2 FROM       235        0          1         1024        5 0 210 0**** 0 254 0 211      4943
 439 420153  2    TRACT X/Y+2 FROM       235        0          1         1024        5 0 210 0**** 0 254 0 211      4944
.....
 440 501174  2    CT X/Y+2 FROM W.       252      235          0            1     1024 0 210 0**** 0 254 0 211      4950
.....
                                                              11101111
                                                              11111100
                                                              11101011
          COMPILE  42.2:   SUM1   252   W
                                                              01010110
*************** IF PAGE OVERFLOW, UNLESS OVERFLOW,                                       *****                  4962
  58 501237  2                  IF         0        1       1024            5     3313 0 210 0**** 0 254 0 211      4988
 493 421189  3                  IF         0        1       1024            5     3313 0 210 0**** 0 254 0 211      4989
.....
 446 501194  3             IF PAGE       494        0          1         1024        5 0 210 0**** 0 254 0 211      4991
 450 410244  3             IF PAGE       494        0          1         1024        5 0 210 0**** 0 254 0 211      4992
.....
 195 703  0  1             IF PAGE       215      245        451          494        0 0 210 0**** 0 254 0 211      5005
 215 703  0  1             IF PAGE       245      451        494            0        1 0 210 0**** 0 254 0 211      5006
 245 703  0  1             IF PAGE       451      494          0            1     1024 0 210 0**** 0 254 0 211      5007
 451 501214  1             IF PAGE       494        0          1         1024        5 0 210 0**** 0 254 0 211      5008
 470 101 12  1             IF PAGE       494        0          1         1024        5 0 210 0**** 0 254 0 211      5009
 471 501225  1             IF PAGE       494        0          1         1024        5 0 210 0**** 0 254 0 211      5010
 481 001 17  1             IF PAGE       494        0          1         1024        5 0 210 0**** 0 254 0 211      5011
 482 100 15  1             IF PAGE        17      494          0            1     1024 0 210 0**** 0 254 0 211      5012
 483 002  7  1             IF PAGE        17      494          0            1     1024 0 210 0**** 0 254 0 211      5013
 484 102 54  1             IF PAGE        24      494          0            1     1024 0 210 0**** 0 254 0 211      5014
 485 001  2  1    IF PAGE OVERFLOW        24      494          0            1     1024 0 210 0**** 0 254 0 211      5015
 486 722  0  1    IF PAGE OVERFLOW         2       24        494            0        1 0 210 0**** 0 254 0 211      5016
 494 101148  3    IF PAGE OVERFLOW         2       24          0            1     1024 0 210 0**** 0 254 0 211      5017
 496 100 10  3    F PAGE OVERFLOW,         2       24          0            1     1024 0 210 0**** 0 254 0 211      5018
 498 401255  3    OVERFLOW, UNLESS         2       24          0            1     1024 0 210 0**** 0 254 0 211      5019
 511 611115  3    OVERFLOW, UNLESS       499        2         24            0        1 0 210 0**** 0 254 0 211      5020
 512 630  0  3    OVERFLOW, UNLESS         2       24          0            1     1024 0 210 0**** 0 254 0 211      5021
 513 210  8  3    OVERFLOW, UNLESS         0        2         24            0        1 0 210 0**** 0 254 0 211      5022
 515 700  0  3    OVERFLOW, UNLESS         2       24          0            1     1024 0 210 0**** 0 254 0 211      5023
 516 721  2  3    OVERFLOW, UNLESS        24        0          1         1024        5 0 210 0**** 0 254 0 211      5024
                                                              01101110
                                                              00101010
                                                              00011000
                                                              00000010
          COMPILE  42.3:   SKT      24
 517 600110  3    OVERFLOW, UNLESS         1     1024          5    33132751467648 0 210 0**** 0 254 0 211      5025
 518 001  2  3    OVERFLOW, UNLESS        43        1       1024            5     3313 0 210 0**** 0 254 0 211      5026
 519 701  0  3    OVERFLOW, UNLESS         2       43          1         1024        5 0 210 0**** 0 254 0 211      5027
                                                              11101101
                                                              00000010
                                                              00000000
          COMPILE  43.0:   STOP     2
 520 600115  3    OVERFLOW, UNLESS         2       43          1         1024        5 0 210 0**** 0 254 0 211      5028
 521 702  0  3    OVERFLOW, UNLESS       499        2         43            1     1024 0 210 0**** 0 254 0 211      5029
 499 500 14  3    OVERFLOW, UNLESS         2       43          1         1024        5 0 210 0**** 0 254 0 211      5030
.....
  67 501236  2    OVERFLOW, UNLESS         0        2         43            1     1024 0 210 0**** 0 254 0 211      5055
 492 002  8  2    OVERFLOW, UNLESS         0        2         43            1     1024 0 210 0**** 0 254 0 211      5056
.....
 195 703  0  2     UNLESS OVERFLOW       215      245        451          494        8 0 210 0**** 0 254 0 211      5073
 215 703  0  2     UNLESS OVERFLOW       245      451        494            8        2 0 210 0**** 0 254 0 211      5074
 245 703  0  2     UNLESS OVERFLOW       451      494          8            2       43 0 210 0**** 0 254 0 211      5075
 451 501214  2     UNLESS OVERFLOW       494        8          2           43        1 0 210 0**** 0 254 0 211      5076
 470 101 12  2     UNLESS OVERFLOW       494        8          2           43        1 0 210 0**** 0 254 0 211      5077
 471 501225  2     UNLESS OVERFLOW       494        8          2           43        1 0 210 0**** 0 254 0 211      5078
```

```
  481 001 17   2     UNLESS OVERFLOW          494          8          2         43          1 0 210 0**** 0 254 0 211     5079
  482 100 15   2     UNLESS OVERFLOW           17        494          8          2         43 0 210 0**** 0 254 0 211     5080
  484 102 54   2     UNLESS OVERFLOW           17        494          8          2         43 0 210 0**** 0 254 0 211     5081
  485 001  2   2     UNLESS OVERFLOW           17        494          8          2         43 0 210 0**** 0 254 0 211     5082
  486 722  0   2     UNLESS OVERFLOW            2         17        494          8          2 0 210 0**** 0 254 0 211     5083
.....
                                                                    01010010
**************** UNLESS X NEGATIVE, IF X CODE(3), IF KEY(0),                                                *****          5085
  514 002  4   2           UNLESS               2         17          8          2         43 0 210 0**** 0 254 0 211     5090
.....
                                                                    01100110
                                                                    00101011
                                                                    00010001
                                                                    00000110
        COMPILE  43.1:   EXT     17
                                                                    11101001
                                                                    00000010
                                                                    00000000
        COMPILE  43.2:   STOP     2
   67 501236   3             UNLESS               0          2       2091          2         43 0 210 0**** 0 254 0 211     5123
  492 002  8   3             UNLESS               0          2       2091          2         43 0 210 0**** 0 254 0 211     5124
.....
                                                                    11100010
                                                                    00000000
                                                                    00101111
        COMPILE  43.3:   MOD3     0
                                                                    11101101
                                                                    00000000
                                                                    11011101
        COMPILE  44.0:   TRA1     0
  452 101147   3    NLESS X NEGATIVE          494          8          2       2091          2 0 210 0**** 0 254 0 211     5194
  453 501209   1    NLESS X NEGATIVE          494          8          2       2091          2 0 210 0**** 0 254 0 211     5195
  465 001  8   1    NLESS X NEGATIVE          494          8          2       2091          2 0 210 0**** 0 254 0 211     5196
  466 100 53   1    NLESS X NEGATIVE            8        494          8          2       2091 0 210 0**** 0 254 0 211     5197
  467 501222   1    NLESS X NEGATIVE            8        494          8          2       2091 0 210 0**** 0 254 0 211     5198
  478 021231   1    NLESS X NEGATIVE            8        494          8          2       2091 0 210 0**** 0 254 0 211     5199
  479 623  0   1    NLESS X NEGATIVE           17          8        494          8          2 0 210 0**** 0 254 0 211     5201
  480 722  0   1    NLESS X NEGATIVE            8         17        494          8          2 0 210 0**** 0 254 0 211     5202
.....
  514 002  4   3     S X NEGATIVE, IF           8         17          8          2       2091 0 210 0**** 0 254 0 211     5209
.....
                                                                    11100000
                                                                    00010001
                                                                    00001100
        COMPILE  44.1:   EXA     17
                                                                    11101100
                                                                    00000010
                                                                    00000000
        COMPILE  44.2:   SIOP     2
   58 501237   3     S X NEGATIVE, IF           0          2       2092          2       2091 0 210 0**** 0 254 0 211     5242
.....
                                                                    11100010
                                                                    00000000
                                                                    00101111
        COMPILE  44.3:   MOD3     0
                                                                    11101101
                                                                    00000000
                                                                    11011101
        COMPILE  45.0:   TRA1     0
  453 501209   2     ATIVE, IF X CODE          494          0          2       2092          2 0 210 0**** 0 254 0 211     5313
  465 001  8   2     ATIVE, IF X CODE          494          0          2       2092          2 0 210 0**** 0 254 0 211     5314
  466 100 53   2     ATIVE, IF X CODE            8        494          0          2       2092 0 210 0**** 0 254 0 211     5315
  468 102  7   1     ATIVE, IF X CODE            8        494          0          2       2092 0 210 0**** 0 254 0 211     5316
  469 501217   1     ATIVE, IF X CODE            8        494          0          2       2092 0 210 0**** 0 254 0 211     5317
  473 102174   1     ATIVE, IF X CODE            8        494          0          2       2092 0 210 0**** 0 254 0 211     5318
  474 420 77   1     TIVE, IF X CODE(            8        494          0          2       2092 0 210 0**** 0 254 0 211     5319
.....
  475 203  5   1     VE, IF X CODE(3)            3          8        494          0          2 0 210 0**** 0 254 0 211     5337
  476 102142   1     VE, IF X CODE(3)            3          8        494          0          2 0 210 0**** 0 254 0 211     5338
  477 700  0   1     VE, IF X CODE(3)            3          8        494          0          2 0 210 0**** 0 254 0 211     5339
  478 021234   2     VE, IF X CODE(3)            8        494          0          2       2092 0 210 0**** 0 254 0 211     5340
  479 623  0   2     VE, IF X CODE(3)           24          8        494          0          2 0 210 0**** 0 254 0 211     5342
  480 722  0   2     VE, IF X CODE(3)            8         24        494          0          2 0 210 0**** 0 254 0 211     5343
.....
                                                                    11100000
                                                                    00011000
                                                                    00001000
        COMPILE  45.1:   SKA     24
                                                                    11100001
                                                                    00000010
                                                                    00000000
```

```
          COMPILE  45.2:   STOP      2
   195 703   0   3     CODE(3); IF KEY          215       245       451       494         0 0 210 0**** 0 254 0 211     5399
   215 703   0   3     CODE(3); IF KEY          245       451       494         0         2 0 210 0**** 0 254 0 211     5400
   245 703   0   3     CODE(3); IF KEY          451       494         0         2      2093 0 210 0**** 0 254 0 211     5401
   451 501214  3     CODE(3); IF KEY          494         0         2      2093         2 0 210 0**** 0 254 0 211     5402
   470 101  12  3     CODE(3); IF KEY          494         0         2      2093         2 0 210 0**** 0 254 0 211     5403
   472 001  10  1     CODE(3); IF KEY          494         0         2      2093         2 0 210 0**** 0 254 0 211     5404
   473 102174  2     CODE(3); IF KEY           10       494         0         2      2093 0 210 0**** 0 254 0 211     5405
   474 420  77  2   CODE(3); IF KEY(           10       494         0         2      2093 0 210 0**** 0 254 0 211     5406
.....
   475 203   5   2   DE(3); IF KEY(0)           0        10       494         0         2 0 210 0**** 0 254 0 211     5424
   476 102142  2   DE(3); IF KEY(0)           0        10       494         0         2 0 210 0**** 0 254 0 211     5425
   477 700   0   2   DE(3); IF KEY(0)           0        10       494         0         2 0 210 0**** 0 254 0 211     5426
   478 021231  3   DE(3); IF KEY(0)          10       494         0         2      2093 0 210 0**** 0 254 0 211     5427
   479 623   0   3   DE(3); IF KEY(0)          17        10       494         0         2 0 210 0**** 0 254 0 211     5429
   480 722   0   3   DE(3); IF KEY(0)          10        17       494         0         2 0 210 0**** 0 254 0 211     5430
.....

***************   SET A(X) = ""GOSH..".                                  01010010

                                                                          01101110                                  *****     5432
                                                                          00101101
                                                                          00010001
                                                                          00001010

          COMPILE  45.3:   SKK       17                                   11101011
                                                                          00000010
                                                                          00000000

          COMPILE  46.0:   STOP      2
   403 421  91   2                SET A          217         0         2        46         2 0 210 0**** 0 254 0 211     5475
   347 001   1   3                SET A          404       217         0         2        46 0 210 0**** 0 254 0 211     5476
   348 100102  3                SET A            1       404       217         0         2 0 210 0**** 0 254 0 211     5477
   349 501  97  1                SET A            1       404       217         0         2 0 210 0**** 0 254 0 211     5478
   353 623   0   2                SET A            1       404       217         0         2 0 210 0**** 0 254 0 211     5479
   354 500164  2                SET A          404         1       217         0         2 0 210 0**** 0 254 0 211     5480
.....

                                                                          11100010
                                                                          00000000
                                                                          00101111

          COMPILE  46.1:   MOD3      0                                    11101101
                                                                          00000000
                                                                          11011101

          COMPILE  46.2:   TRA1      0                                    11100000
                                                                          00000001
                                                                          10100111

          COMPILE  46.3:   TAIR      1
   404 102147  2                  SET A(X)       65756         1       217         0         2 1**** 0**** 0 254 0 211     5620
   405 421  99  2                SET A(X) =       65756         1       217         0         2 1**** 0**** 0 254 0 211     5621
   355 401  91  2                SET A(X) =         406     65756         1       217         0 1**** 0**** 0 254 0 211     5622
.....
   350 111103  3           SET A(X) = "           1       356       406     65756         1 1**** 0**** 0 254 0 211     5625
   351 703   0   2           SET A(X) = "         356       406     65756         1       217 1**** 0**** 0 254 0 211     5626
   357 100105  2           SET A(X) = "         406     65756         1       217         0 1**** 0**** 0 254 0 211     5627
   359 101154  1           SET A(X) = "         406     65756         1       217         0 1**** 0**** 0 254 0 211     5628
   361 001   0   1           SET A(X) = "         406     65756         1       217         0 1**** 0**** 0 254 0 211     5629
   362 601155  1           SET A(X) = "           0       406     65756         1       217 1**** 0**** 0 254 0 211     5630
   363 001   0   1           SET A(X) = "           0       406     65756         1       217 1**** 0**** 0 254 0 211     5631
   364 001   2   1           SET A(X) = "           0         0       406     65756         1 1**** 0**** 0 254 0 211     5632
   365 611150  1           SET A(X) = "           2         0         0       406     65756 1**** 0**** 0 254 0 211     5633
   366 101200  1           SET A(X) = "           0         0       406     65756         1 1**** 0**** 0 254 0 211     5634
   367 600160  1        SET A(X) = ""             0         0       406     65756         1 1**** 0**** 0 254 0 211     5635
   368 710   0   1        SET A(X) = ""         154         0         0       406     65756 1**** 0**** 0 254 0 211     5636
   369 100154  1        SET A(X) = ""         154         0         0       406     65756 1**** 0**** 0 254 0 211     5637
   371 300154  1        SET A(X) = ""         154         0         0       406     65756 1**** 0**** 0 254 0 211     5638
   382 511126  1        SET A(X) = ""           0         0         0       406     65756 1**** 0**** 0 254 0 211     5639
   383 012   2   1        SET A(X) = ""           0         0       406     65756         1 1**** 0**** 0 254 0 211     5640
   384 300   0   1        SET A(X) = ""           0         0       406     65756         1 1**** 0**** 0 254 0 211     5641
   377 501121  1        SET A(X) = ""           0         0       406     65756         1 1**** 0**** 0 254 0 211     5642
   378 620   0   1        SET A(X) = ""           0         0       406     65756         1 1**** 0**** 0 254 0 211     5643
   380 311   0   1        SET A(X) = ""           0         0         0       406     65756 1**** 0**** 0 254 0 211     5644
   381 002154  1        SET A(X) = ""           0         0       406     65756         1 1**** 0**** 0 254 0 211     5645
   373 501117  1        SET A(X) = ""         154         0       406     65756         1 1**** 0**** 0 254 0 211     5646
   374 042   2   1        SET A(X) = ""         154         0       406     65756         1 1**** 0**** 0 254 0 211     5647
   375 300   0   1        SET A(X) = ""           0         0       406     65756         1 1**** 0**** 0 254 0 211     5648
   364 501108  1        SET A(X) = ""           0         0       406     65756         1 1**** 0**** 0 254 0 211     5649
   365 001   2   2        SET A(X) = ""           0         0       406     65756         1 1**** 0**** 0 254 0 211     5650
   366 611150  2        SET A(X) = ""           2         0         0       406     65756 1**** 0**** 0 254 0 211     5651
   367 101200  2        SET A(X) = ""           0         0       406     65756         1 1**** 0**** 0 254 0 211     5652
   368 600160  2     SET A(X) = ""G             0         0       406     65756         1 1**** 0**** 0 254 0 211     5653
   368 710   0   2     SET A(X) = ""G         183         0         0       406     65756 1**** 0**** 0 254 0 211     5654
```

```
  369 100183   2      SET  A(X) = ""G          183          0          0        406      65756 1**** 0**** 0 254 0 211      5655
  370 300154   2      SET  A(X) = ""G          183          0          0        406      65756 1**** 0**** 0 254 0 211      5656
  372 011   0  1      SET  A(X) = ""G          183          0          0        406      65756 1**** 0**** 0 254 0 211      5657
  373 042   2  2      SET  A(X) = ""G          183          0        406      65756          1 1**** 0**** 0 254 0 211      5658
  374 300   0  2      SET  A(X) = ""G            0          0        406      65756          1 1**** 0**** 0 254 0 211      5659
  375 501108   2      SET  A(X) = ""G            0          0        406      65756          1 1**** 0**** 0 254 0 211      5660
  364 001   2  3      SET  A(X) = ""G            0          0        406      65756          1 1**** 0**** 0 254 0 211      5661
  365 611150   3      SET  A(X) = ""G            2          0          0        406      65756 1**** 0**** 0 254 0 211      5662
  366 101200   3      SET  A(X) = ""G            0          0        406      65756          1 1**** 0**** 0 254 0 211      5663
  367 600160   3    SET  A(X) = ""GO             0          0        406      65756          1 1**** 0**** 0 254 0 211      5664
  368 710   0  3    SET  A(X) = ""GO           191          0          0        406      65756 1**** 0**** 0 254 0 211      5665
  369 100191   3    SET  A(X) = ""GO           191          0          0        406      65756 1**** 0**** 0 254 0 211      5666
  370 300154   3    SET  A(X) = ""GO           191          0          0        406      65756 1**** 0**** 0 254 0 211      5667
  372 011   0  2    SET  A(X) = ""GO           191          0          0        406      65756 1**** 0**** 0 254 0 211      5668
  373 042   2  3    SET  A(X) = ""GO           191          0        406      65756          1 1**** 0**** 0 254 0 211      5669
  374 300   0  3    SET  A(X) = ""GO             0          0        406      65756          1 1**** 0**** 0 254 0 211      5670
  375 501108   3    SET  A(X) = ""GO             0          0        406      65756          1 1**** 0**** 0 254 0 211      5671
.....
  372 011   0  3   SET A(X) = ""GOS           163          0          0        406      65756 1**** 0**** 0 254 0 211      5679
.....
  371 511126   2   A(X) = ""GOSH.."  1543216480768          0        406      65756          1 1**** 0**** 0 254 0 211      5723
  382 012   2  2   A(X) = ""GOSH..":3216480768            0        406      65756          1 1**** 0**** 0 254 0 211      5724
  383 300   0  2   A(X) = ""GOSH..":3080323221            0        406      65756          1 1**** 0**** 0 254 0 211      5725
  385 042   2  1   A(X) = ""GOSH..":3080323221            0        406      65756          1 1**** 0**** 0 254 0 211      5726
  386 300   0  1   A(X) = ""GOSH..":3216480768            0        406      65756          1 1**** 0**** 0 254 0 211      5727
  387 501129   1   A(X) = ""GOSH..":3216480768            0        406      65756          1 1**** 0**** 0 254 0 211      5728
  385 042   2  2   A(X) = ""GOSH..":3216480768            0        406      65756          1 1**** 0**** 0 254 0 211      5729
  386 300   0  2   A(X) = ""GOSH..":2747250586            0        406      65756          1 1**** 0**** 0 254 0 211      5730
  388 402  46  1   A(X) = ""GOSH..":2747250586            0        406      65756          1 1**** 0**** 0 254 0 211      5731
.....
                                                                                                                  01011100
                                                                                                                  10100001
      COMPILE CONSTANT IN LOCATION 1,200       0  0  9  5   9  5 11   8 10  3 11 15 11  7  9 10
                                                                                                                  11001000
                                                                                                                  10011010
                                                                                                                  10110111
                                                                                                                  10111111
                                                                                                                  10100011
                                                                                                                  10111000
                                                                                                                  10010101
                                                                                                                  10010101
                                                                                                                  00000000
                                                                                                                  01010100
  389 602155   1   A(X) = ""GOSH.."          200          0        406      65756          1 1**** 0**** 0 254 0 211      5812
  390 611125   1   A(X) = ""GOSH.."          200          0        406      65756          1 1**** 0**** 0 254 0 211      5813
  391 301   0  1   A(X) = ""GOSH.."            0        406      65756          1        217 1**** 0**** 0 254 0 211      5814
  393 511138   1   A(X) = ""GOSH.."            0        406      65756          1        217 1**** 0**** 0 254 0 211      5815
  394 600155   1   A(X) = ""GOSH.."          406      65756          1        217          0 1**** 0**** 0 254 0 211      5816
  395 600125   1   A(X) = ""GOSH.."            1        406      65756          1        217 1**** 0**** 0 254 0 211      5817
  396 722   0  1   A(X) = ""GOSH.."          200          1        406      65756          1 1**** 0**** 0 254 0 211      5818
  406 620   0  2   A(X) = ""GOSH.."          200          1      65756          1        217 1**** 0**** 0 254 0 211      5819
  407 750   0  2   A(X) = ""GOSH.."            1        200          1      65756          1 1**** 0**** 0 254 0 211      5820
  408 200   1  2   A(X) = ""GOSH.."            1        200          1      65756          1 1**** 0**** 0 254 0 211      5821
  409 653   0  2   A(X) = ""GOSH.."            1        200          1      65756          1 1**** 0**** 0 254 0 211      5822
.....
  413 501169   2   A(X) = ""GOSH.."          200          1      65756          1        217 1**** 0**** 0 254 0 211      5826
  425 721221   2   A(X) = ""GOSH.."          200          1      65756          1        217 1**** 0**** 0 254 0 211      5827
                                                                                                                  01100010
                                                                                                                  00101111
                                                                                                                  11001000
                                                                                                                  11011101
       COMPILE  47.0:   TRA1   200
  426 623   0  2   A(X) = ""GOSH.."        65756          1        217          0          2 1**** 0**** 0 254 0 211      5828
  427 511174   2   A(X) = ""GOSH.."            1      65756        217          0          2 1**** 0**** 0 254 0 211      5829
.....
                                                                                                                  11101011
                                                                                                                  00000000
                                                                                                                  00100011
       COMPILE  47.1:   MODO     0
                                                                                                                  11100001
                                                                                                                  11011100
                                                                                                                  11011001
       COMPILE  47.2:   TRM1   220   CCCCCC
    4 510   2  3   A(X) = ""GOSH..":            2         46          2       2093          2 0**** 0**** 0 254 0 211      5836
    2 402  23  3   A(X) = ""GOSH..":           46          2       2093          2       2092 0**** 0**** 0 254 0 211      5837
.....
                                                                                                                  01010101
                                                                                                                  01100000
      FIXUP LOCATION  46,0
                                                                                                                  00101110
                                                                                                                  00101111
```

```
                                                                   00101100
                                                                   01011111
                                                                   01101000
      FIXUP LOCATION  45.2
                                                                   00101101
                                                                   00101111
                                                                   00101100
                                                                   01010100
                                                                   01101000
      FIXUP LOCATION  44.2
                                                                   00101100
                                                                   00101111
                                                                   00101100
                                                                   01010101
                                                                   01101000
      FIXUP LOCATION  43.2
                                                                   00101011
                                                                   00101111
                                                                   00101100
                                                                   01010010
                                                                   01100000
      FIXUP LOCATION  43.0
                                                                   00101011
                                                                   00101111
                                                                   00101100
                                                                   01011010
**************** SET CCCCCCDD = "*@/*;:$>",                                                       *****               5991
  403 421 91   3        SET CCCCCCDD       217         0          1        1024        5 0    0 0    0 0    0 0    0    6023
.....
  352 600170   2        SET CCCCCCDD       404       217          0           1     1024 0    0 0    0 0    0 0    0    6027
  353 623   0  3        SET CCCCCCDD         4       404        217           0        1 0    0 0    0 0    0 0    0    6028
  354 500164   3        SET CCCCCCDD       404         4        217           0        1 0    0 0    0 0    0 0    0    6029
.....
  404 102147   3      SET CCCCCCDD =       217         4        217           0        1 0    0 0    0 0    0 0    0    6033
  405 421  99  3      SET CCCCCCDD =       217         4        217           0        1 0    0 0    0 0    0 0    0    6034
  355 401  91  3      SET CCCCCCDD =       406       217          4         217        0 0    0 0    0 0    0 0    0    6035
.....
  351 703   0  3    SET CCCCCCDD = "       356       406        217           4      217 0    0 0    0 0    0 0    0    6039
  357 100105   3    SET CCCCCCDD = "       406       217          4         217        0 0    0 0    0 0    0 0    0    6040
  359 101154   2    SET CCCCCCDD = "       406       217          4         217        0 0    0 0    0 0    0 0    0    6041
  361 001   0  2    SET CCCCCCDD = "       406       217          4         217        0 0    0 0    0 0    0 0    0    6042
  362 601155   2    SET CCCCCCDD = "         0       406        217           4      217 0    0 0    0 0    0 0    0    6043
  363 001   0  2    SET CCCCCCDD = "         0       406        217           4      217 0    0 0    0 0    0 0    0    6044
.....
  376 501107   1    CCDD = "*@/*;:$>2911931565         0        406         217        4 0    0 0    0 0    0 0    0    6132
  363 001   0  3    CCDD = "*@/*;:$>2911931565         0        406         217        4 0    0 0    0 0    0 0    0    6133
.....
  371 511126   3    CDD = "*@/*;:$>"       154          02911931565           0      406 0    0 0    0 0    0 0    0    6141
  382 012   2  3    CDD = "*@/*;:$>"          02911931565         0         406      217 0    0 0    0 0    0 0    0    6142
  383 300   0  3    CDD = "*@/*;:$>"          02911931565         0         406      217 0    0 0    0 0    0 0    0    6143
  384 501121   2    CDD = "*@/*;:$>"          02911931565         0         406      217 0    0 0    0 0    0 0    0    6144
  377 620   0  2    CDD = "*@/*;:$>"          02911931565         0         406      217 0    0 0    0 0    0 0    0    6145
  378 311   0  2    CDD = "*@/*;:$>"2911931565          02911931565           0      406 0    0 0    0 0    0 0    0    6146
  379 501132   1    CDD = "*@/*;:$>"          02911931565         0         406      217 0    0 0    0 0    0 0    0    6147
  388 402  46  2    CDD = "*@/*;:$>"          02911931565         0         406      217 0    0 0    0 0    0 0    0    6148
.....
                                                                   10100001
      COMPILE CONSTANT IN LOCATION 1.199      0   0   0   0   0   0   0    0   0   0   0   0   0   0   0
                                                                   11000111
                                                                   00000000
                                                                   00000000
                                                                   00000000
                                                                   00000000
                                                                   00000000
                                                                   00000000
                                                                   00000000
                                                                   00000000
                                                                   01011010
  389 602155   2    CDD = "*@/*;:$>"       1992911931565          0         406      217 0    0 0    0 0    0 0    0    6229
  390 611125   2    CDD = "*@/*;:$>"       1992911931565          0         406      217 0    0 0    0 0    0 0    0    6230
  391 301   0  2    CDD = "*@/*;:$>"2911931565         0        406         217        4 0    0 0    0 0    0 0    0    6231
  392 501132   1    CDD = "*@/*;:$>"2911931565         0        406         217        4 0    0 0    0 0    0 0    0    6232
  388 402  46  3    CDD = "*@/*;:$>"2911931565         0        406         217        4 0    0 0    0 0    0 0    0    6233
.....
                                                                   10100001
      COMPILE CONSTANT IN LOCATION 1.198     11   0   8  10   9  14   9    6  10  13   9   0   8  12  10  13
                                                                   11000110
                                                                   10101101
                                                                   10001100
                                                                   10010000
                                                                   10101101
```

```
                                                                             10010110
                                                                             10011110
                                                                             10001010
                                                                             10110000
                                                                             01010111
 389 602155  3   CDD = "*@/*;:$>"       198          0          406          217          4 0   0 0   0 0   0 0   0        6314
 390 611125  3   CDD = "*@/*;:$>"       198          0          406          217          4 0   0 0   0 0   0 0   0        6315
 391 301   0 3   CDD = "*@/*;:$>"         0        406          217            4        217 0   0 0   0 0   0 0   0        6316
 393 511138  2   CDD = "*@/*;:$>"         0        406          217            4        217 0   0 0   0 0   0 0   0        6317
 394 600155  2   CDD = "*@/*;:$>"       406        217            4          217          0 0   0 0   0 0   0 0   0        6318
 395 600125  2   CDD = "*@/*;:$>"         2        406          217            4        217 0   0 0   0 0   0 0   0        6319
 396 722   0 2   CDD = "*@/*;:$>"       198          2          406          217          4 0   0 0   0 0   0 0   0        6320
 406 620   0 3   CDD = "*@/*;:$>"       198          2          217            4        217 0   0 0   0 0   0 0   0        6321
 407 750   0 3   CDD = "*@/*;:$>"         2        198            2          217          4 0   0 0   0 0   0 0   0        6322
 408 200   4 3   CDD = "*@/*;:$>"         2        198            2          217          4 0   0 0   0 0   0 0   0        6323
.....
                                                                             01101110
                                                                             00101111
                                                                             11000110
                                                                             11011101
       COMPILE  47.3:   TRA1   198
                                                                             11101001
                                                                             11011001
                                                                             11011001
       COMPILE  48.0:   TRM1   217    CCCCCC
 413 501169  3   CDD = "*@/*;:$>"       199          2          218            4        217 0   0 0   0 0   0 0   0        6340
 425 721221  3   CDD = "*@/*;:$>"       199          2          218            4        217 0   0 0   0 0   0 0   0        6341
                                                                             11100000
                                                                             11000111
                                                                             11011101
       COMPILE  48.1:   TRA1   199
 426 623   0 3   CDD = "*@/*;:$>"       218          4          217            0          1 0   0 0   0 0   0 0   0        6342
 427 511174  3   CDD = "*@/*;:$>"         4        218          217            0          1 0   0 0   0 0   0 0   0        6343
.....
                                                                             11101011
                                                                             11011010
                                                                             11011001
       COMPILE  48.2:   TRM1   218
                                                                             01010011
*************** BEGIN LOOP S FROM Z(I)+X(I)/Y BY Z(I)+X(I)/Y                                          *****                   6355
  51 512221  3                BEGIN       0          1         1024            5       3313 0   0 0   0 0   0 0   0        6381
 733 101 55  3                BEGIN       1       1024            5  33132751467648 0   0 0   0 0   0 0   0        6382
 734 503   0 1           BEGIN LOOP       1       1024            5  33132751467648 0   0 0   0 0   0 0   0        6383
 768 102 56  1           BEGIN LOOP       1       1024            5  33132751467648 0   0 0   0 0   0 0   0        6384
 769 102101  1           BEGIN LOOP       1       1024            5  33132751467648 0   0 0   0 0   0 0   0        6385
 770 600180  1         BEGIN LOOP S       1       1024            5  33132751467648 0   0 0   0 0   0 0   0        6386
 771 102 50  1         BEGIN LOOP S     241          1         1024            5       3313 0   0 0   0 0   0 0   0        6387
 772 420244  1   EGIN LOOP S FROM       241          1         1024            5       3313 0   0 0   0 0   0 0   0        6388
.....
                                                                             01101110
                                                                             00110000
                                                                             11010001
                                                                             01000011
       COMPILE  48.3:   LKBR1  209    Z
                                                                             11100110
                                                                             00001101
                                                                             01000100
       COMPILE  49.0:   LIB     13
                                                                             11101101
                                                                             11111110
                                                                             11011101
       COMPILE  49.1:   TRA1   254    I
                                                                             11100001
                                                                             00001001
                                                                             10100111
       COMPILE  49.2:   TAIR     9
                                                                             11100100
                                                                             00000000
                                                                             00101111
       COMPILE  49.3:   MOD3     0
                                                                             11101101
                                                                             00000000
                                                                             00101011
       COMPILE  50.0:   MOD2     0
                                                                             11101001
                                                                             11111111
                                                                             11011101
       COMPILE  50.1:   TRA1   255
                                                                             11100000
                                                                             11010011
                                                                             01000011
```

```
        COMPILE   50.2:    LKBR1   211     X
                                                    11101001
                                                    00000101
                                                    01000100
        COMPILE   50.3:    LIB       5
  171 500176   2    S FROM Z(I)+X(I)          9    5242680       193       215        264 0    0 1 211 1 254 0 209      6649
.....
  240 001237   3      FROM Z(I)+X(I)/          0    5832959       264       257        773 0    0 1 211 1 254 0 209      6664
  241 500219   3      FROM Z(I)+X(I)/        237          0   5832959       264        257 0    0 1 211 1 254 0 209      6665
.....
                                                    11100101
                                                    11010010
                                                    01000011
        COMPILE   51.0:    LKBR1   210     Y
                                                    11101000
                                                    00000001
                                                    01000100
        COMPILE   51.1:    LIB       1
  223 001  0   3    M Z(I)+X(I)/Y BY          0    1048576       237         0    5832959 1 210 1 211 1 254 0 209      6755
.....
                                                    11100001
                                                    00000000
                                                    10100100
        COMPILE   51.2:    LSR       0
                                                    11101110
                                                    11111111
                                                    11011001
        COMPILE   51.3:    TRM1    255
                                                    11100100
                                                    00000000
                                                    00100111
        COMPILE   52.0:    MOD1      0
                                                    11100101
                                                    00000000
                                                    00101011
        COMPILE   52.1:    MOD2      0
                                                    11101001
                                                    11111111
                                                    11011101
        COMPILE   52.2:    TRA1    255
                                                    11100000
                                                    00000000
                                                    00100011
        COMPILE   52.3:    MODO      0
                                                    11100001
                                                    00000000
                                                    11101101
        COMPILE   53.0:    DIV1      0
                                                    11100011
                                                    11111111
                                                    11100001
        COMPILE   53.1:    ADA1    255
  773 701217   1    M Z(I)+X(I)/Y BY        241          1      1024         5       3313 0 210 0 211 0 254 0 209      6790
                                                    11101111
                                                    11110001
                                                    11011001
        COMPILE   53.2:    TRM1    241     S
  774 401 85   1    M Z(I)+X(I)/Y BY        241          1      1024         5       3313 0 210 0 211 0 254 0 209      6791
.....
  775 600110   1    M Z(I)+X(I)/Y BY        241          1      1024         5       3313 0    0 0   0 0   0 0    0      6798
  776 611145   1    M Z(I)+X(I)/Y BY       3125        241         1      1024          5 0    0 0   0 0   0 0    0      6799
  777 701  0   1    M Z(I)+X(I)/Y BY        241          1      1024         5       3313 0    0 0   0 0   0 0    0      6800
                                                    11101010
                                                    11110001
                                                    00000000
        COMPILE   53.3:    STOP    241     S
  778 600110   1    M Z(I)+X(I)/Y BY        241          1      1024         5       3313 0    0 0   0 0   0 0    0      6801
  779 623  0   1    M Z(I)+X(I)/Y BY         54        241         1      1024          5 0    0 0   0 0   0 0    0      6802
  780 101 58   1    M Z(I)+X(I)/Y BY        241         54         1      1024          5 0    0 0   0 0   0 0    0      6803
  782 420242   1    M Z(I)+X(I)/Y BY        241         54         1      1024          5 0    0 0   0 0   0 0    0      6804
  242 001  0   1    M Z(I)+X(I)/Y BY        783        241        54         1       1024 0    0 0   0 0   0 0    0      6805
  243 611105   1    M Z(I)+X(I)/Y BY          0        783       241        54          1 0    0 0   0 0   0 0    0      6806
.....
                                                    11101110
                                                    11010001
                                                    01000011
        COMPILE   54.0:    LKBR1   209     Z
                                                    11101011
                                                    00001101
                                                    01000100
        COMPILE   54.1:    LIB      13
```

```
                                                              11101101
                                                              11111110
                                                              11011101
      COMPILE  54.2:   TRA1   254    I
                                                              11100001
                                                              00001001
                                                              10100111
      COMPILE  54.3:   TAIR     9
                                                              11100100
                                                              00000000
                                                              00101111
      COMPILE  55.0:   MOD3     0
                                                              11101101
                                                              00000000
                                                              00101011
      COMPILE  55.1:   MOD2     0
                                                              11101001
                                                              11111111
                                                              11011101
      COMPILE  55.2:   TRA1   255
                                                              11100000
                                                              11010011
                                                              01000011
      COMPILE  55.3:   LKBR1  211    X
                                                              11101001
                                                              00000101
                                                              01000100
      COMPILE  56.0:   LIB      5
  171 500176   3   )/Y BY Z(I)+X(I)      9    5242880         193        215        264 0   0 1 211 1 254 0 209      7067
.....
                                                              11100101
                                                              11010010
                                                              01000011
      COMPILE  56.1:   LKBR1  210    Y
                                                              11101000
                                                              00000001
                                                              01000100
      COMPILE  56.2:   LIB      1
                                                              01010001
***************                                                                            *****        7166
***************       TO Z(I)+X(I)/Y.                                                      *****        7166
                                                              01101110
                                                              00111000
                                                              00000000
                                                              10100100
      COMPILE  56.3:   LSR      0
                                                              11101011
                                                              11111111
                                                              11011001
      COMPILE  57.0:   TRM1   255
                                                              11100100
                                                              00000000
                                                              00100111
      COMPILE  57.1:   MOD1     0
                                                              11100101
                                                              00000000
                                                              00101011
      COMPILE  57.2:   MOD2     0
                                                              11101001
                                                              11111111
                                                              11011101
      COMPILE  57.3:   TRA1   255
                                                              11100000
                                                              00000000
                                                              00100011
      COMPILE  58.0:   MOD0     0
                                                              11100001
                                                              00000000
                                                              11101101
      COMPILE  58.1:   DIV1     0
                                                              11100011
                                                              11111111
                                                              11100001
      COMPILE  58.2:   ADA1   255
  783 503 18   1              TO       241         54            1        1024        5 0 210 0 211 0 254 0 209      7208
  786 701233   1              TO       241         54            1        1024        5 0 210 0 211 0 254 0 209      7209
                                                              11101111
                                                              11110001
                                                              11101001
      COMPILE  58.3:   ADM1   241    S
  787 102 57   1              TO       241         54            1        1024        5 0 210 0 211 0 254 0 209      7210
```

```
  788 600145  1                    TO       241        54          1       1024          5 0 210 0 211 0 254 0 209     7211
  789 402 23  1                    TO      3125       241         54          1       1024 0 210 0 211 0 254 0 209     7212
.....

                                                                                  01011001
                                                                                  01101100

      FIXUP LOCATION  53.3                                                        00110101
                                                                                  00111011
                                                                                  00100000
                                                                                  01010000
  790 420242  1                    TO       241        54          1       1024          5 0   0 0   0 0   0 0   0     7240
  242 001   0 2                    TO       791       241         54          1       1024 0   0 0   0 0   0 0   0     7241
  243 611105  2                    TO         0       791        241         54             1 0   0 0   0 0   0 0   0     7242
.....

                                                                                  01100010
                                                                                  00111011
                                                                                  11010001
                                                                                  01000011
      COMPILE   59.0:   LKBR1   209   Z                                          11100001
                                                                                  00001101
                                                                                  01000100
      COMPILE   59.1:   LIB      13                                              11101101
                                                                                  11111110
                                                                                  11011101
      COMPILE   59.2:   TRA1    254   I                                          11100001
                                                                                  00001001
                                                                                  10100111
      COMPILE   59.3:   TAIR      9                                             11100100
                                                                                  00000000
                                                                                  00101111
      COMPILE   60.0:   MOD3      0                                             11101101
                                                                                  00000000
                                                                                  00101011
      COMPILE   60.1:   MOD2      0                                             11101001
                                                                                  11111111
                                                                                  11011101
      COMPILE   60.2:   TRA1    255                                             11100000
                                                                                  11010011
                                                                                  01000011
      COMPILE   60.3:   LKBR1   211   X                                          11101001
                                                                                  00000101
                                                                                  01000100
      COMPILE   61.0:   LIB       5                                             11100101
                                                                                  11010010
                                                                                  01000011
      COMPILE   61.1:   LKBR1   210   Y                                          11101000
                                                                                  00000001
                                                                                  01000100
      COMPILE   61.2:   LIB       1                                             11100001
                                                                                  00000000
                                                                                  10100100
      COMPILE   61.3:   LSR       0                                             11101110
                                                                                  11111111
                                                                                  11011001
      COMPILE   62.0:   TRM1    255                                             11100100
                                                                                  00000000
                                                                                  00100111
      COMPILE   62.1:   MOD1      0                                             11100101
                                                                                  00000000
                                                                                  00101011
      COMPILE   62.2:   MOD2      0                                             11101001
                                                                                  11111111
                                                                                  11011101
      COMPILE   62.3:   TRA1    255                                             11100000
                                                                                  00000000
```

```
                                                            00100011
         COMPILE  63.0:   MODO     0
                                                            11100001
                                                            00000000
                                                            11101101
         COMPILE  63.1:   DIV1     0
                                                            11100011
                                                            11111111
                                                            11100001
         COMPILE  63.2:   ADA1   255
  791 711227  1    TO Z(I)+X(I)/Y.       241        54         1      1024        5 0 210 0 211 0 254 0 209      7644
                                                            11101111
                                                            11110001
                                                            11100011
         COMPILE  63.3:   SUA1   241    S
  792 001 17  1    TO Z(I)+X(I)/Y.        54         1      1024         5     3313 0 210 0 211 0 254 0 209      7645
  793 711 12  1    TO Z(I)+X(I)/Y.        17        54         1      1024        5 0 210 0 211 0 254 0 209      7646
                                                            11100011
                                                            00010001
                                                            00001100
         COMPILE  64.0:   EXA     17
  794 600110  1    TO Z(I)+X(I)/Y.        54         1      1024         5     3313 0 210 0 211 0 254 0 209      7647
  795 001  3  1    TO Z(I)+X(I)/Y.      1088        54         1      1024        5 0 210 0 211 0 254 0 209      7648
  796 701  0  1    TO Z(I)+X(I)/Y.         3      1088        54         1     1024 0 210 0 211 0 254 0 209      7649
                                                            11101100
                                                            00000011
                                                            00000000
         COMPILE  64.1:   STOP     3
  797 500122  1    TO Z(I)+X(I)/Y.         3      1088        54         1     1024 0 210 0 211 0 254 0 209      7650
.....
                                                            01010011
*************** BEGIN LOOP T FROM Z(I)+X(I)/Y TO 0.                                        *****               7658
  734 503  0  2           BEGIN LOOP       3      1088        54         1     1024 0 210 0 211 0 254 0 209      7686
  768 102 56  2           BEGIN LOOP       3      1088        54         1     1024 0 210 0 211 0 254 0 209      7687
  769 102101  2           BEGIN LOOP       3      1088        54         1     1024 0 210 0 211 0 254 0 209      7688
  770 600180  2         BEGIN LOOP T       3      1088        54         1     1024 0 210 0 211 0 254 0 209      7689
  771 102 50  2         BEGIN LOOP T     251         3      1088        54        1 0 210 0 211 0 254 0 209      7690
  772 420244  2   EGIN LOOP T FROM       251         3      1088        54        1 0 210 0 211 0 254 0 209      7691
.....
                                                            01101010
                                                            01000000
                                                            00000000
                                                            00101111
         COMPILE  64.2:   MOD3     0
                                                            11100011
                                                            00000000
                                                            00101011
         COMPILE  64.3:   MOD2     0
                                                            11101001
                                                            11111111
                                                            11011101
         COMPILE  65.0:   TRA1   255
                                                            11100000
                                                            00000000
                                                            10100100
         COMPILE  65.1:   LSR      0
                                                            11101110
                                                            11111111
                                                            11011001
         COMPILE  65.2:   TRM1   255
                                                            11100100
                                                            00000000
                                                            00100111
         COMPILE  65.3:   MOD1     0
                                                            11100101
                                                            00000000
                                                            00101011
         COMPILE  66.0:   MOD2     0
                                                            11101001
                                                            11111111
                                                            11011101
         COMPILE  66.1:   TRA1   255
                                                            11100000
                                                            00000000
                                                            00100011
         COMPILE  66.2:   MODO     0
                                                            11100001
                                                            00000000
                                                            11101101
         COMPILE  66.3:   DIV1     0
                                                            11100011
```

```
                                                                     11111111
                                                                     11100001
        COMPILE   67.0:    ADA1    255
 773 701217  2    M Z(I)+X(I)/Y TO        251        3         1088        54        1 0 210 0 211 0 254 0 209    7945
                                                                     11101111
                                                                     11111011
                                                                     11011001
        COMPILE   67.1:    TRM1    251     V
 774 401 85  2    M Z(I)+X(I)/Y TO        251        3         1088        54        1 0 210 0 211 0 254 0 209    7946
.....
 775 600110  2    M Z(I)+X(I)/Y TO        251        3         1088        54        1 0    0 0    0 0    0 0    0    7953
 776 611145  2    M Z(I)+X(I)/Y TO       2115      251            3      1088       54 0    0 0    0 0    0 0    0    7954
 777 701  0  2    M Z(I)+X(I)/Y TO        251        3         1088        54        1 0    0 0    0 0    0 0    0    7955
                                                                     11100000
                                                                     11111011
                                                                     00000000
        COMPILE   67.2:    STOP    251     V
 778 600110  2    M Z(I)+X(I)/Y TO        251        3         1088        54        1 0    0 0    0 0    0 0    0    7956
 779 623  0  2    M Z(I)+X(I)/Y TO       3139      251            3      1088       54 0    0 0    0 0    0 0    0    7957
 780 101 58  2    M Z(I)+X(I)/Y TO        251     3139            3      1088       54 0    0 0    0 0    0 0    0    7958
 781 503 16  1    M Z(I)+X(I)/Y TO        251     3139            3      1088       54 0    0 0    0 0    0 0    0    7959
 784 001  1  1    M Z(I)+X(I)/Y TO        251     3139            3      1088       54 0    0 0    0 0    0 0    0    7960
 785 711165  1    M Z(I)+X(I)/Y TO          1      251         3139         3     1088 0    0 0    0 0    0 0    0    7961
                                                                     11100100
                                                                     00000001
                                                                     10100101
        COMPILE   67.3:    INK       1
 786 701233  2    M Z(I)+X(I)/Y TO        251     3139            3      1088       54 0    0 0    0 0    0 0    0    7962
                                                                     11101110
                                                                     11111011
                                                                     11101001
        COMPILE   68.0:    ADM1    251     V
 787 102 57  2    M Z(I)+X(I)/Y TO        251     3139            3      1088       54 0    0 0    0 0    0 0    0    7963
 788 600145  2    M Z(I)+X(I)/Y TO        251     3139            3      1088       54 0    0 0    0 0    0 0    0    7964
 789 402 23  2    M Z(I)+X(I)/Y TO       2115      251         3139         3     1088 0    0 0    0 0    0 0    0    7965
.....
                                                                     01010011
                                                                     01101000
    FIXUP LOCATION  67.2
                                                                     01000011
                                                                     01000100
                                                                     00100100
                                                                     01011001
 790 420242  2    M Z(I)+X(I)/Y TO        251     3139            3      1088       54 0    0 0    0 0    0 0    0    7993
 242 001  0  3    M Z(I)+X(I)/Y TO        791      251         3139         3     1088 0    0 0    0 0    0 0    0    7994
 243 611105  3    M Z(I)+X(I)/Y TO          0      791          251      3139        3 0    0 0    0 0    0 0    0    7995
.....
                                                                     01100110
                                                                     01000100
                                                                     00000000
                                                                     10100101
        COMPILE   68.1:    INK       0
 791 711227  2    (I)+X(I)/Y TO 0.        251     3139            3      1088       54 0    0 0    0 0    0 0    0    8036
                                                                     11101001
                                                                     11111011
                                                                     11100011
        COMPILE   68.2:    SUA1    251     V
 792 001 17  2    (I)+X(I)/Y TO 0.       3139        3         1088        54        1 0    0 0    0 0    0 0    0    8037
 793 711 12  2    (I)+X(I)/Y TO 0.         17     3139            3      1088       54 0    0 0    0 0    0 0    0    8038
                                                                     11101001
                                                                     00010001
                                                                     00001100
        COMPILE   68.3:    EXA      17
 794 600110  2    (I)+X(I)/Y TO 0.       3139        3         1088        54        1 0    0 0    0 0    0 0    0    8039
 795 001  3  2    (I)+X(I)/Y TO 0.         69     3139            3      1088       54 0    0 0    0 0    0 0    0    8040
 796 701  0  2    (I)+X(I)/Y TO 0.          3       69         3139         3     1088 0    0 0    0 0    0 0    0    8041
                                                                     11101100
                                                                     00000011
                                                                     00000000
        COMPILE   69.0:    STOP      3
 797 500122  2    (I)+X(I)/Y TO 0.          3       69         3139         3     1088 0    0 0    0 0    0 0    0    8042
.....
                                                                     01010011
**************** PRINT C(N).                                                                      *****            8050
  63 513 48  1             PRINT            0        3           69      3139        3 0    0 0    0 0    0 0    0    8076
 816 100174  1             PRINT            3       69         3139         3     1088 0    0 0    0 0    0 0    0    8077
 818 421 99  1           PRINT C            3       69         3139         3     1088 0    0 0    0 0    0 0    0    8078
.....
 349 501 97  2           PRINT C            1      356          819         3       69 0    0 0    0 0    0 0    0    8082
.....
                                                                     01100110
```

```
                                                    01000101
                                                    11001110
                                                    01000011
         COMPILE  69.1:   LKBR1  206    N
                                                    11100010
                                                    00001101
                                                    01000100
         COMPILE  69.2:   LIB       13
  313 501 45  2          PRINT C(N)          1       171       221       356          1 0   0 0   0 0   0 1 206      8156
.....
  313 501 45  3          PRINT C(N)          5       171       221       356          1 0   0 0   0 0   0 1 206      8167
.....
                                                    11101101
                                                    00000000
                                                    00101111
         COMPILE  69.3:   MOD3       0
                                                    11101101
                                                    00000000
                                                    11011101
         COMPILE  70.0:   TRA1       0
                                                    11100000
                                                    00001001
                                                    10100111
         COMPILE  70.1:   TAIR       9
  356 722  0  1          PRINT C(N)    590044        1       819         3         69 0   0 0   0 1**** 0 206    8226
  819 100 51  1          PRINT C(N)    590044        1         3        69       3139 0   0 0   0 1**** 0 206    8227
  821 721169  1         PRINT C(N).    590044        1         3        69       3139 0   0 0   0 1**** 0 206    8228
                                                    11100100
                                                    00000000
                                                    00101011
         COMPILE  70.2:   MOD2       0
                                                    11101001
                                                    11011100
                                                    10101001
         COMPILE  70.3:   PA1      220    CCCCCC
  822 500  3  1         PRINT C(N).         3        69      3139         3       1088 0   0 0   0 0**** 0 206    8229
.....
                                                    01010010
*************** PRINT($#ID.DD:D,ZZ:Z,%.%X.XSB2B≤)   Z(Q(N)+1)+V(N).                     *****                8236
   63 513 48  2                 PRINT       0         3        69      3139          3 0   0 0   0 0**** 0 206    8262
  816 100174  2                 PRINT       3        69      3139         3       1088 0   0 0   0 0**** 0 206    8263
  817 503 57  1                PRINT(       3        69      3139         3       1088 0   0 0   0 0**** 0 206    8264
  825 001  0  1                PRINT(       3        69      3139         3       1088 0   0 0   0 0**** 0 206    8265
  826 601115  1                PRINT(       0         3        69      3139          3 0   0 0   0 0**** 0 206    8266
  827 001  3  1                PRINT(       0         3        69      3139          3 0   0 0   0 0**** 0 206    8267
  828 611150  1                PRINT(       3         0         3        69       3139 0   0 0   0 0**** 0 206    8268
  829 100138  1                PRINT(       0         3        69      3139          3 0   0 0   0 0**** 0 206    8269
  830 002  8  1               PRINT($       0         3        69      3139          3 0   0 0   0 0**** 0 206    8270
  831 001  3  1               PRINT($       8         3        69      3139          3 0   0 0   0 0**** 0 206    8271
  832 611150  1               PRINT($       3         8         3        69       3139 0   0 0   0 0**** 0 206    8272
  833 100141  1               PRINT($       8         3        69      3139          3 0   0 0   0 0**** 0 206    8273
  834 002  1  1              PRINT($#       8         3        69      3139          3 0   0 0   0 0**** 0 206    8274
  835 001  1  1              PRINT($#       9         3        69      3139          3 0   0 0   0 0**** 0 206    8275
  836 012  1  1              PRINT($#       1         9         3        69       3139 0   0 0   0 0**** 0 206    8276
  837 001  3  1              PRINT($#      16         9         3        69       3139 0   0 0   0 0**** 0 206    8277
  838 601150  1              PRINT($#       3        16         9         3         69 0   0 0   0 0**** 0 206    8278
  839 100170  1              PRINT($#       3        16         9         3         69 0   0 0   0 0**** 0 206    8279
  841 100180  1             PRINT($#I       3        16         9         3         69 0   0 0   0 0**** 0 206    8280
  843 100149  1             PRINT($#I       3        16         9         3         69 0   0 0   0 0**** 0 206    8281
  845 100130  1             PRINT($#I       3        16         9         3         69 0   0 0   0 0**** 0 206    8282
  847 100185  1             PRINT($#I       3        16         9         3         69 0   0 0   0 0**** 0 206    8283
  848 513135  1             PRINT($#I       3        16         9         3         69 0   0 0   0 0**** 0 206    8284
  903 002  1  1             PRINT($#I      16         9         3        69       3139 0   0 0   0 0**** 0 206    8285
  904 002  2  1             PRINT($#I      17         9         3        69       3139 0   0 0   0 0**** 0 206    8286
  905 602115  1             PRINT($#I      19         9         3        69       3139 0   0 0   0 0**** 0 206    8287
  906 503 68  1             PRINT($#I      19         9         3        69       3139 0   0 0   0 0**** 0 206    8288
  836 012  1  2             PRINT($#I      19         9         3        69       3139 0   0 0   0 0**** 0 206    8289
  837 001  3  2             PRINT($#I     304         9         3        69       3139 0   0 0   0 0**** 0 206    8290
  838 601150  2             PRINT($#I       3       304         9         3         69 0   0 0   0 0**** 0 206    8291
  839 100170  2             PRINT($#I       3       304         9         3         69 0   0 0   0 0**** 0 206    8292
  841 100180  2            PRINT($#ID       3       304         9         3         69 0   0 0   0 0**** 0 206    8293
  842 503113  1            PRINT($#ID       3       304         9         3         69 0   0 0   0 0**** 0 206    8294
  881 622  0  1            PRINT($#ID       3       304         9         3         69 0   0 0   0 0**** 0 206    8295
  882 611150  1            PRINT($#ID       3       305         9         3         69 0   0 0   0 0**** 0 206    8296
  883 100148  1            PRINT($#ID     305         9         3        69       3139 0   0 0   0 0**** 0 206    8297
  885 100158  1           PRINT($#ID.     305         9         3        69       3139 0   0 0   0 0**** 0 206    8298
  887 503132  1           PRINT($#ID.     305         9         3        69       3139 0   0 0   0 0**** 0 206    8299
  900 002  1  1           PRINT($#ID.     305         9         3        69       3139 0   0 0   0 0**** 0 206    8300
  901 002  1  1           PRINT($#ID.     306         9         3        69       3139 0   0 0   0 0**** 0 206    8301
  902 002  1  1           PRINT($#ID.     307         9         3        69       3139 0   0 0   0 0**** 0 206    8302
  903 002  1  2           PRINT($#ID.     308         9         3        69       3139 0   0 0   0 0**** 0 206    8303
```

904	002	2	2	PRINT($#ID.	309		9	3	69	3139	0	0	0	0	0****	0	206	8304
905	602	115	2	PRINT($#ID.	311		9	3	69	3139	0	0	0	0	0****	0	206	8305
906	503	68	2	PRINT($#ID.	311		9	3	69	3139	0	0	0	0	0****	0	206	8306
836	012	1	3	PRINT($#ID.	311		9	3	69	3139	0	0	0	0	0****	0	206	8307
837	001	3	3	PRINT($#ID.	4976		9	3	69	3139	0	0	0	0	0****	0	206	8308
838	601	150	3	PRINT($#ID.	3	4976	9	3		69	0	0	0	0	0****	0	206	8309
839	100	170	3	PRINT($#ID.	3	4976	9	3		69	0	0	0	0	0****	0	206	8310
841	100	180	3	PRINT($#ID.	3	4976	9	3		69	0	0	0	0	0****	0	206	8311
843	100	149	2	PRINT($#ID.	3	4976	9	3		69	0	0	0	0	0****	0	206	8312
844	503	120	1	PRINT($#ID.	3	4976	9	3		69	0	0	0	0	0****	0	206	8313
888	611	150	1	PRINT($#ID.	3	4976	9	3		69	0	0	0	0	0****	0	206	8314
889	100	180	1	PRINT($#ID.	4976		9	3	69	3139	0	0	0	0	0****	0	206	8315
890	503	131	1	PRINT($#ID.D	4976		9	3	69	3139	0	0	0	0	0****	0	206	8316
899	002	3	1	PRINT($#ID.D	4976		9	3	69	3139	0	0	0	0	0****	0	206	8317
900	002	1	2	PRINT($#ID.D	4979		9	3	69	3139	0	0	0	0	0****	0	206	8318
901	002	1	2	PRINT($#ID.D	4980		9	3	69	3139	0	0	0	0	0****	0	206	8319
902	002	1	2	PRINT($#ID.D	4981		9	3	69	3139	0	0	0	0	0****	0	206	8320
903	002	1	3	PRINT($#ID.D	4982		9	3	69	3139	0	0	0	0	0****	0	206	8321
904	002	2	3	PRINT($#ID.D	4983		9	3	69	3139	0	0	0	0	0****	0	206	8322
905	602	115	3	PRINT($#ID.D	4985		9	3	69	3139	0	0	0	0	0****	0	206	8323
906	503	68	3	PRINT($#ID.D	4985		9	3	69	3139	0	0	0	0	0****	0	206	8324
**																		
842	503	113	2	PRINT($#ID.DD	3	79760	9	3		69	0	0	0	0	0****	0	206	8330
881	622	0	2	PRINT($#ID.DD	3	79760	9	3		69	0	0	0	0	0****	0	206	8331
882	611	150	2	PRINT($#ID.DD	3	79761	9	3		69	0	0	0	0	0****	0	206	8332
883	100	148	2	PRINT($#ID.DD	79761		9	3	69	3139	0	0	0	0	0****	0	206	8333
885	100	158	2	PRINT($#ID.DD:	79761		9	3	69	3139	0	0	0	0	0****	0	206	8334
886	503	128	1	PRINT($#ID.DD:	79761		9	3	69	3139	0	0	0	0	0****	0	206	8335
896	002	1	1	PRINT($#ID.DD:	79761		9	3	69	3139	0	0	0	0	0****	0	206	8336
897	002	3	1	PRINT($#ID.DD:	79762		9	3	69	3139	0	0	0	0	0****	0	206	8337
898	002	1	1	PRINT($#ID.DD:	79765		9	3	69	3139	0	0	0	0	0****	0	206	8338
899	002	3	2	PRINT($#ID.DD:	79766		9	3	69	3139	0	0	0	0	0****	0	206	8339
900	002	1	3	PRINT($#ID.DD:	79769		9	3	69	3139	0	0	0	0	0****	0	206	8340
901	002	1	3	PRINT($#ID.DD:	79770		9	3	69	3139	0	0	0	0	0****	0	206	8341
902	002	1	3	PRINT($#ID.DD:	79771		9	3	69	3139	0	0	0	0	0****	0	206	8342
**																		
842	503	113	3	PRINT($#ID.DD:D	3	1276400	9	3		69	0	0	0	0	0****	0	206	8352
881	622	0	3	PRINT($#ID.DD:D	3	1276400	9	3		69	0	0	0	0	0****	0	206	8353
882	611	150	3	PRINT($#ID.DD:D	3	1276401	9	3		69	0	0	0	0	0****	0	206	8354
883	100	148	3	PRINT($#ID.DD:D	1276401		9	3	69	3139	0	0	0	0	0****	0	206	8355
884	503	130	1	PRINT($#ID.DD:D,	1276401		9	3	69	3139	0	0	0	0	0****	0	206	8356
898	002	1	2	PRINT($#ID.DD:D,	1276401		9	3	69	3139	0	0	0	0	0****	0	206	8357
899	002	3	3	PRINT($#ID.DD:D,	1276402		9	3	69	3139	0	0	0	0	0****	0	206	8358
**																		
840	503	114	1	RINT($#ID.DD:D,Z		3 20422576	9	3		69	0	0	0	0	0****	0	206	8370
**																		
885	100	158	3	INT($#ID.DD:D,ZZ	20422576		9	3	69	3139	0	0	0	0	0****	0	206	8373
887	503	132	2	INT($#ID.DD:D,ZZ	20422576		9	3	69	3139	0	0	0	0	0****	0	206	8374
**																		
840	503	114	2	INT($#ID.DD:D,ZZ		3 326761312	9	3		69	0	0	0	0	0****	0	206	8386
**																		
886	503	128	2	NT($#ID.DD:D,ZZ:	326761312		9	3	69	3139	0	0	0	0	0****	0	206	8390
896	002	1	2	NT($#ID.DD:D,ZZ:	326761312		9	3	69	3139	0	0	0	0	0****	0	206	8391
897	002	3	2	NT($#ID.DD:D,ZZ:	326761313		9	3	69	3139	0	0	0	0	0****	0	206	8392
898	002	1	3	NT($#ID.DD:D,ZZ:	326761316		9	3	69	3139	0	0	0	0	0****	0	206	8393
**																		
840	503	114	3	T($#ID.DD:D,ZZ:Z		3 933213920	9	3		69	0	0	0	0	0****	0	206	8406
**																		
884	503	130	2	($#ID.DD:D,ZZ:Z,	933213920		9	3	69	3139	0	0	0	0	0****	0	206	8409
**																		
843	100	149	3	$#ID.DD:D,ZZ:Z,%		32046520992	9	3		69	0	0	0	0	0****	0	206	8424
845	100	130	2	$#ID.DD:D,ZZ:Z,%		32046520992	9	3		69	0	0	0	0	0****	0	206	8425
847	100	185	2	$#ID.DD:D,ZZ:Z,%		32046520992	9	3		69	0	0	0	0	0****	0	206	8426
849	100	163	1	$#ID.DD:D,ZZ:Z,%		32046520992	9	3		69	0	0	0	0	0****	0	206	8427
851	110	178	1	$#ID.DD:D,ZZ:Z,%		32046520992	9	3		69	0	0	0	0	0****	0	206	8428
853	100	171	1	$#ID.DD:D,ZZ:Z,%	2046520992		9	3	69	3139	0	0	0	0	0****	0	206	8429
854	503	137	1	$#ID.DD:D,ZZ:Z,%	2046520992		9	3	69	3139	0	0	0	0	0****	0	206	8430
**																		
844	503	120	2	#ID.DD:D,ZZ:Z,%.		32679564800	9	3		69	0	0	0	0	0****	0	206	8439
888	611	150	2	#ID.DD:D,ZZ:Z,%.		32679564800	9	3		69	0	0	0	0	0****	0	206	8440
889	100	180	2	#ID.DD:D,ZZ:Z,%.	2679564800		9	3	69	3139	0	0	0	0	0****	0	206	8441
891	002	8	1	ID.DD:D,ZZ:Z,%.%	2679564800		9	3	69	3139	0	0	0	0	0****	0	206	8442
892	503	85	1	ID.DD:D,ZZ:Z,%.%	2679564808		9	3	69	3139	0	0	0	0	0****	0	206	8443
853	100	171	2	ID.DD:D,ZZ:Z,%.%	2679564808		9	3	69	3139	0	0	0	0	0****	0	206	8444
854	503	137	2	ID.DD:D,ZZ:Z,%.%	2679564808		9	3	69	3139	0	0	0	0	0****	0	206	8445
**																		
845	100	130	3	D.DD:D,ZZ:Z,%.%X		34218331264	9	3		69	0	0	0	0	0****	0	206	8454
847	100	185	3	D.DD:D,ZZ:Z,%.%X		34218331264	9	3		69	0	0	0	0	0****	0	206	8455
849	100	163	2	D.DD:D,ZZ:Z,%.%X		34218331264	9	3		69	0	0	0	0	0****	0	206	8456
851	110	178	2	D.DD:D,ZZ:Z,%.%X		34218331264	9	3		69	0	0	0	0	0****	0	206	8457
853	100	171	3	D.DD:D,ZZ:Z,%.%X	4218331264		9	3	69	3139	0	0	0	0	0****	0	206	8458

```
  855 100168   1    D.DD:D,ZZ:Z,%.%X4218331264          9          3         69       3139 0    0 0    0 0**** 0 206     8459
  856 503134   1    D.DD:D,ZZ:Z,%.%X4218331264          9          3         69       3139 0    0 0    0 0**** 0 206     8460
..844
  844 503120   3    .DD:D,ZZ:Z,%.%X.          33068790848          9          3         69 0    0 0    0 0**** 0 206     8472
  888 611150   3    .DD:D,ZZ:Z,%.%X.          33068790848          9          3         69 0    0 0    0 0**** 0 206     8473
  889 100180   3    .DD:D,ZZ:Z,%.%X.3068790848          9          3         69       3139 0    0 0    0 0**** 0 206     8474
  891 002  8   2    DD:D,ZZ:Z,%.%X.X3068790848          9          3         69       3139 0    0 0    0 0**** 0 206     8475
  892 503 85   2    DD:D,ZZ:Z,%.%X.X3068790856          9          3         69       3139 0    0 0    0 0**** 0 206     8476
..855
  855 100168   2    DD:D,ZZ:Z,%.%X.X3068790856          9          3         69       3139 0    0 0    0 0**** 0 206     8478
  856 503134   2    DD:D,ZZ:Z,%.%X.X3068790856          9          3         69       3139 0    0 0    0 0**** 0 206     8479
..849
  849 100163   3    D:D,ZZ:Z,%.%X.XS          31856013504          9          3         69 0    0 0    0 0**** 0 206     8493
  850 513136   1    D:D,ZZ:Z,%.%X.XS          31856013504          9          3         69 0    0 0    0 0**** 0 206     8494
..851
  851 110178   3    :D,ZZ:Z,%.%X.XSB          33926412320          9          3         69 0    0 0    0 0**** 0 206     8507
  852 503133   1    :D,ZZ:Z,%.%X.XSB3926412320          9          3         69       3139 0    0 0    0 0**** 0 206     8508
..846
  846 503125   1    D,ZZ:Z,%.%X.XSB2          32693055056          9          3         69 0    0 0    0 0**** 0 206     8522
  893 611150   1    D,ZZ:Z,%.%X.XSB2          32693055056          9          3         69 0    0 0    0 0**** 0 206     8523
  894 102178   1    D,ZZ:Z,%.%X.XSB22693055056          9          3         69       3139 0    0 0    0 0**** 0 206     8524
  895 503129   1    ,ZZ:Z,%.%X.XSB2B2693055056          9          3         69       3139 0    0 0    0 0**** 0 206     8525
  897 002  3   3    ,ZZ:Z,%.%X.XSB2B2693055056          9          3         69       3139 0    0 0    0 0**** 0 206     8526
..855
  855 100168   3    ZZ:Z,%.%X.XSB2B≤ 139208145          9          3         69       3139 0    0 0    0 0**** 0 206     8547
  857 012  1   1    ZZ:Z,%.%X.XSB2B≤ 139208145          9          3         69       3139 0    0 0    0 0**** 0 206     8548
  858 203 32   1    ZZ:Z,%.%X.XSB2B≤22273330323          9          3         69       3139 0    0 0    0 0**** 0 206     8549
  859 200 16   1    ZZ:Z,%.%X.XSB2B≤22273330323          9          3         69       3139 0    0 0    0 0**** 0 206     8550
  860 003 16   1    ZZ:Z,%.%X.XSB2B≤22273330323          9          3         69       3139 0    0 0    0 0**** 0 206     8551
  861 012  1   1    ZZ:Z,%.%X.XSB2B≤22273330307          9          3         69       3139 0    0 0    0 0**** 0 206     8552
  862 200 16   1    ZZ:Z,%.%X.XSB2B≤12775546551          9          3         69       3139 0    0 0    0 0**** 0 206     8553
  863 503 98   1    ZZ:Z,%.%X.XSB2B≤12775546551          9          3         69       3139 0    0 0    0 0**** 0 206     8554
  866 042  1   1    ZZ:Z,%.%X.XSB2B≤12775546551          9          3         69       3139 0    0 0    0 0**** 0 206     8555
  867 200 16   1    ZZ:Z,%.%X.XSB2B≤22273330307          9          3         69       3139 0    0 0    0 0**** 0 206     8556
  869 042  1   1    ZZ:Z,%.%X.XSB2B≤22273330307          9          3         69       3139 0    0 0    0 0**** 0 206     8557
  870 011  0   1    ZZ:Z,%.%X.XSB2B≤ 139208144          9          3         69       3139 0    0 0    0 0**** 0 206     8558
  871 042  1   1    ZZ:Z,%.%X.XSB2B≤ 1392081533         69       3139          3 0    0 0    0 0**** 0 206     8559
  872 600115   1    ZZ:Z,%.%X.XSB2B≤2693055069          3         69       3139       3 0    0 0    0 0**** 0 206     8560
  873 012  1   1    ZZ:Z,%.%X.XSB2B≤    152693055069          3         69       3139 0    0 0    0 0**** 0 206     8561
  874 600190   1    ZZ:Z,%.%X.XSB2B≤   2402693055069          3         69       3139 0    0 0    0 0**** 0 206     8562
  875 300  0   1    ZZ:Z,%.%X.XSB2B≤     0         2402693055069          3         69 0    0 0    0 0**** 0 206     8563
  876 513139   1    ZZ:Z,%.%X.XSB2B≤     0         2402693055069          3         69 0    0 0    0 0**** 0 206     8564
  907 620  0   1    ZZ:Z,%.%X.XSB2B≤   2402693055069          3         69       3139 0    0 0    0 0**** 0 206     8565
  908 700190   1    ZZ:Z,%.%X.XSB2B≤2693055069          2402693055069          3         69 0    0 0    0 0**** 0 206     8566
  909 030  0   1    ZZ:Z,%.%X.XSB2B≤2693055069          2402693055069          3         69 0    0 0    0 0**** 0 206     8567
  910 600190   1    ZZ:Z,%.%X.XSB2B≤   2402693055069          3         69       3139 0    0 0    0 0**** 0 206     8568
  911 203 16   1    ZZ:Z,%.%X.XSB2B≤     0         2402693055069          3         69 0    0 0    0 0**** 0 206     8569
  912 602190   1    ZZ:Z,%.%X.XSB2B≤     0         2402693055069          3         69 0    0 0    0 0**** 0 206     8570
  913 011  0   1    ZZ:Z,%.%X.XSB2B≤     0         2402693055069          3         69 0    0 0    0 0**** 0 206     8571
  914 001  0   1    ZZ:Z,%.%X.XSB2B≤   2402693055069          3         69       3139 0    0 0    0 0**** 0 206     8572
  915 100151   1    ZZ:Z,%.%X.XSB2B≤     0         2402693055069          3         69 0    0 0    0 0**** 0 206     8573
  917 100143   1    ZZ:Z,%.%X.XSB2B≤     0         2402693055069          3         69 0    0 0    0 0**** 0 206     8574
  918 002143   1    ZZ:Z,%.%X.XSB2B≤     0         2402693055069          3         69 0    0 0    0 0**** 0 206     8575
  919 102142   1    ZZ:Z,%.%X.XSB2B≤   143         2402693055069          3         69 0    0 0    0 0**** 0 206     8576
  920 420244   1    Z:Z,%.%X.XSB2B≤)   143         2402693055069          3         69 0    0 0    0 0**** 0 206     8577
.....
```

```
01100010
01000111
11010001
01000011

11101010
00000101
01000100

11100101
00000000
00101111

11101101
00000000
11011101

11100000
00000001
10100111

11101100
00000000
00100011
```

```
COMPILE  71.0:   LKBR1  209   Z

COMPILE  71.1:   LIB      5

COMPILE  71.2:   MOD3     0

COMPILE  71.3:   TRA1     0

COMPILE  72.0:   TAIR     1

COMPILE  72.1:   MOD0     0
```

```
                                                                    11100001
                                                                    11110000
                                                                    11011101
        COMPILE   72.2:    TRA1    240     A
                                                                    11101111
                                                                    00001001
                                                                    10100111
        COMPILE   72.3:    TAIR       9
  179 500186   3    SB2B≤)     Z(Q(N)+      5832704         193         215          245         921 0**** 1 209 1**** 0 206       8899
  186 420 77   3    SB2B≤)     Z(Q(N)+      5832704         193         215          245         921 0**** 1 209 1**** 0 206       8900
.....
  187 700  0   3     2B≤)     Z(Q(N)+1)           1    5832704          193          215         245 0**** 1 209 1**** 0 206       8918
  188 002  1   3     2B≤)     Z(Q(N)+1)     5832704         193         215          245         921 0**** 1 209 1**** 0 206       8919
.....
                                                                    11100100
                                                                    00000000
                                                                    00100111
        COMPILE   73.0:    MOD1      0
                                                                    11100101
                                                                    00000000
                                                                    00101011
        COMPILE   73.1:    MOD2      0
                                                                    11101001
                                                                    00000000
                                                                    11011101
        COMPILE   73.2:    TRA1      0
                                                                    11100000
                                                                    11111111
                                                                    11011001
        COMPILE   73.3:    TRM1    255
                                                                    11100100
                                                                    00000000
                                                                    00101111
        COMPILE   74.0:    MOD3      0
                                                                    11101101
                                                                    00000000
                                                                    11011101
        COMPILE   74.1:    TRA1      0
                                                                    11100000
                                                                    00000001
                                                                    10100111
        COMPILE   74.2:    TAIR       1
  294 001255   2     Z(Q(N)+1)+V(N).           266            0      65786          257         921 1**** 0 209 0**** 0 206       9101
  295 711221   2     Z(Q(N)+1)+V(N).           255          266          0        65786         257 1**** 0 209 0**** 0 206       9102
                                                                    11101100
                                                                    11111111
                                                                    11011101
        COMPILE   74.3:    TRA1    255
  296 001  1   2     Z(Q(N)+1)+V(N).           266            0      65786          257         921 1**** 0 209 0**** 0 206       9103
  297 501 33   2     Z(Q(N)+1)+V(N).             1          266          0        65786         257 1**** 0 209 0**** 0 206       9104
.....
                                                                    11100000
                                                                    00000000
                                                                    00100011
        COMPILE   75.0:    MODO      0
                                                                    11100001
                                                                    11111010
                                                                    11100001
        COMPILE   75.1:    ADA1    250
  921 623  0   1     Z(Q(N)+1)+V(N).           143        2402693055069            3          69 0**** 0 209 0**** 0 206       9121
  922 711202   1     Z(Q(N)+1)+V(N).           240        1432693055069            3          69 0**** 0 209 0**** 0 206       9122
                                                                    11101010
                                                                    11110000
                                                                    11001010
        COMPILE   75.2:    PNS-    240     A
  923 301  0   1     Z(Q(N)+1)+V(N).        1432693055069          3           69        3139 0**** 0 209 0**** 0 206       9123
  924 701185   1     Z(Q(N)+1)+V(N).        1432693055069          3           69        3139 0**** 0 209 0**** 0 206       9124
                                                                    11101001
                                                                    10001111
                                                                    10111001
        COMPILE   75.3:    PC-P    143
  925 520  3   1     Z(Q(N)+1)+V(N).        1432693055069          3           69        3139 0**** 0 209 0**** 0 206       9125
.....
                                                                    01010101
*************** PRINT($#2B)I.  PRINT(2B-)9. PRINT Y LEFT.                                    *****                        9132
   63 513 48   3              PRINT            0            3         69         3139           3 0**** 0 209 0**** 0 206       9158
  816 100174   3              PRINT            3           69       3139            3        1088 0**** 0 209 0**** 0 206       9159
  817 503 57   2             PRINT(            3           69       3139            3        1088 0**** 0 209 0**** 0 206       9160
  825 001  0   2             PRINT(            3           69       3139            3        1088 0**** 0 209 0**** 0 206       9161
  826 601115   2             PRINT(            0            3         69         3139           3 0**** 0 209 0**** 0 206       9162
  827 001  3   2             PRINT(            0            3         69         3139           3 0**** 0 209 0**** 0 206       9163
```

```
 828 611150   2          PRINT(          3          0          3         69       3139 0**** 0 209 0**** 0 206     9164
 829 100138   2          PRINT(          0          3         69       3139          3 0**** 0 209 0**** 0 206     9165
 830 002   8  2       PRINT($            0          3         69       3139          3 0**** 0 209 0**** 0 206     9166
 831 001   3  2       PRINT($            8          3         69       3139          3 0**** 0 209 0**** 0 206     9167
 832 611150   2       PRINT($            3          8          3         69       3139 0**** 0 209 0**** 0 206     9168
 833 100141   2       PRINT($            8          3         69       3139          3 0**** 0 209 0**** 0 206     9169
 834 002   1  2    PRINT($#              8          3         69       3139          3 0**** 0 209 0**** 0 206     9170
 835 001   1  2    PRINT($#              9          3         69       3139          3 0**** 0 209 0**** 0 206     9171
**:**:
 846 503125   2     PRINT($#2          3         16          9          3         69 0**** 0 209 0**** 0 206     9179
 893 611150   2     PRINT($#2          3         16          9          3         69 0**** 0 209 0**** 0 206     9180
 894 102178   2     PRINT($#2         16          9          3         69       3139 0**** 0 209 0**** 0 206     9181
 895 503129   2    PRINT($#2B         16          9          3         69       3139 0**** 0 209 0**** 0 206     9182
**:**:
 857 012   1  2  PRINT($#2B)        464          9          3         69       3139 0**** 0 209 0**** 0 206     9205
 858 203  32  2  PRINT($#2B)       7424          9          3         69       3139 0**** 0 209 0**** 0 206     9206
 859 200  16  2  PRINT($#2B)       7424          9          3         69       3139 0**** 0 209 0**** 0 206     9207
 861 012   1  2  PRINT($#2B)       7424          9          3         69       3139 0**** 0 209 0**** 0 206     9208
 862 200  16  2  PRINT($#2B)     118784          9          3         69       3139 0**** 0 209 0**** 0 206     9209
 864 002  16  1  PRINT($#2B)     118784          9          3         69       3139 0**** 0 209 0**** 0 206     9210
 865 503  93  1  PRINT($#2B)     118800          9          3         69       3139 0**** 0 209 0**** 0 206     9211
 861 012   1  3  PRINT($#2B)     118800          9          3         69       3139 0**** 0 209 0**** 0 206     9212
 862 200  16  3  PRINT($#2B)    1900800          9          3         69       3139 0**** 0 209 0**** 0 206     9213
 864 002  16  2  PRINT($#2B)    1900800          9          3         69       3139 0**** 0 209 0**** 0 206     9214
 865 503  93  2  PRINT($#2B)    1900816          9          3         69       3139 0**** 0 209 0**** 0 206     9215
**:**:
 864 002  16  3  PRINT($#2B)   30413056          9          3         69       3139 0**** 0 209 0**** 0 206     9218
 865 503  93  3  PRINT($#2B)   30413072          9          3         69       3139 0**** 0 209 0**** 0 206     9219
**:**:
 863 503  98  2  PRINT($#2B) 286331165          9          3         69       3139 0**** 0 209 0**** 0 206     9262
 866 042   1  2  PRINT($#2B) 286331165          9          3         69       3139 0**** 0 209 0**** 0 206     9263
 867 200  16  2  PRINT($#2B) 286331153          9          3         69       3139 0**** 0 209 0**** 0 206     9264
 868 503  98  1  PRINT($#2B) 286331153          9          3         69       3139 0**** 0 209 0**** 0 206     9265
 866 042   1  3  PRINT($#2B) 286331153          9          3         69       3139 0**** 0 209 0**** 0 206     9266
 867 200  16  3  PRINT($#2B) 286331153          9          3         69       3139 0**** 0 209 0**** 0 206     9267
 868 503  98  2  PRINT($#2B) 286331153          9          3         69       3139 0**** 0 209 0**** 0 206     9268
**:**:
 868 503  98  3  PRINT($#2B) 286331153          9          3         69       3139 0**** 0 209 0**** 0 206     9271
**:**:
 869 042   1  2  PRINT($#2B) 286334209          9          3         69       3139 0**** 0 209 0**** 0 206     9304
 870 011   0  2  PRINT($#2B) 286331344          9          3         69       3139 0**** 0 209 0**** 0 206     9305
 871 042   1  2  PRINT($#2B) 286331353          3         69       3139          3 0**** 0 209 0**** 0 206     9306
 872 600115   2  PRINT($#2B) 286331165          3         69       3139          3 0**** 0 209 0**** 0 206     9307
 873 012   1  2  PRINT($#2B)          1 286331165          3         69       3139 0**** 0 209 0**** 0 206     9308
 874 600190   2  PRINT($#2B)         16 286331165          3         69       3139 0**** 0 209 0**** 0 206     9309
 875 300   0  2  PRINT($#2B)          1         16 286331165          3         69 0**** 0 209 0**** 0 206     9310
 877 003   1  1  PRINT($#2B)          1         16 286331165          3         69 0**** 0 209 0**** 0 206     9311
 878 033   0  1  PRINT($#2B)          0         16 286331165          3         69 0**** 0 209 0**** 0 206     9312
 879 503145   1  PRINT($#2B)          0         16 286331165          3         69 0**** 0 209 0**** 0 206     9313
 913 011   0  2  PRINT($#2B)          0         16 286331165          3         69 0**** 0 209 0**** 0 206     9314
 914 001   0  2  PRINT($#2B)         16 286331165          3         69       3139 0**** 0 209 0**** 0 206     9315
 915 100151   2  PRINT($#2B)          0         16 286331165          3         69 0**** 0 209 0**** 0 206     9316
 917 100143   2  PRINT($#2B)          0         16 286331165          3         69 0**** 0 209 0**** 0 206     9317
 919 102142   2  PRINT($#2B)          0         16 286331165          3         69 0**** 0 209 0**** 0 206     9318
 920 420244   2  PRINT($#2B)          0         16 286331165          3         69 0**** 0 209 0**** 0 206     9319
*****
                                                                  01100010
                                                                  01001100
                                                                  11111110
                                                                  11011101
     COMPILE  76.0:   TRA1   254   I
 921 623   0  2      PRINT($#2B)I.          0         16 286331165          3         69 0**** 0 209 0**** 0 206     9347
 922 711202   2      PRINT($#2B)I.         16          0 286331165          3         69 0**** 0 209 0**** 0 206     9348
                                                                  11101011
                                                                  00010000
                                                                  11001010
     COMPILE  76.1:   PNS=    16
 923 301   0  2      PRINT($#2B)I.          0 286331165          3         69       3139 0**** 0 209 0**** 0 206     9349
 925 520   3  2      PRINT($#2B)I.          0 286331165          3         69       3139 0**** 0 209 0**** 0 206     9350
**:**:
 817 503  57  3  ($#2B)I.  PRINT(          3         69       3139          3       1088 0**** 0 209 0**** 0 206     9385
 825 001   0  3  ($#2B)I.  PRINT(          3         69       3139          3       1088 0**** 0 209 0**** 0 206     9386
 826 601115   3  ($#2B)I.  PRINT(          0          3         69       3139          3 0**** 0 209 0**** 0 206     9387
 827 001   3  3  ($#2B)I.  PRINT(          0          3         69       3139          3 0**** 0 209 0**** 0 206     9388
 828 611150   3  ($#2B)I.  PRINT(          3          0          3         69       3139 0**** 0 209 0**** 0 206     9389
 829 100138   3  ($#2B)I.  PRINT(          0          3         69       3139          3 0**** 0 209 0**** 0 206     9390
 831 001   3  3  $#2B)I.  PRINT(2          0          3         69       3139          3 0**** 0 209 0**** 0 206     9391
 832 611150   3  $#2B)I.  PRINT(2          3          0          3         69       3139 0**** 0 209 0**** 0 206     9392
 833 100141   3  $#2B)I.  PRINT(2          0          3         69       3139          3 0**** 0 209 0**** 0 206     9393
 835 001   1  3  $#2B)I.  PRINT(2          0          3         69       3139          3 0**** 0 209 0**** 0 206     9394
*****
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  846 503125   3    $#2B)I.   PRINT(2          3          16           0          3          69 0**** 0 209 0**** 0 206     9402
  893 611150   3    $#2B)I.   PRINT(2          3          16           0          3          69 0**** 0 209 0**** 0 206     9403
  894 102178   3    $#2B)I.   PRINT(2         16           0           3         69        3139 0**** 0 209 0**** 0 206     9404
  895 503129   3    #2B)I.   PRINT(2B        16           0           3         69        3139 0**** 0 209 0**** 0 206     9405
.....
  857 012  1   3    2B)I.   PRINT(2B-       464           0           3         69        3139 0**** 0 209 0**** 0 206     9428
  858 203 32   3    2B)I.   PRINT(2B-      7424           0           3         69        3139 0**** 0 209 0**** 0 206     9429
  859 200 16   3    2B)I.   PRINT(2B-      7424           0           3         69        3139 0**** 0 209 0**** 0 206     9430
.....
  863 503 98   3    2B)I.   PRINT(2B- 286331165           0           3         69        3139 0**** 0 209 0**** 0 206     9485
.....
  869 042  1   3    2B)I.   PRINT(2B- 286334209           0           3         69        3139 0**** 0 209 0**** 0 206     9527
  870 011  0   3    2B)I.   PRINT(2B- 286331344           0           3         69        3139 0**** 0 209 0**** 0 206     9528
  871 042  1   3    2B)I.   PRINT(2B- 286331344           3          69       3139           3 0**** 0 209 0**** 0 206     9529
  872 600115   3    2B)I.   PRINT(2B- 286331165           3          69       3139           3 0**** 0 209 0**** 0 206     9530
  873 012  1   3    2B)I.   PRINT(2B-          1 286331165           3         69        3139 0**** 0 209 0**** 0 206     9531
  874 600190   3    2B)I.   PRINT(2B-         16 286331165           3         69        3139 0**** 0 209 0**** 0 206     9532
  875 300  0   3    2B)I.   PRINT(2B-          1          16 286331165          3          69 0**** 0 209 0**** 0 206     9533
  877 003  1   2    2B)I.   PRINT(2B-          1          16 286331165          3          69 0**** 0 209 0**** 0 206     9534
  878 033  0   2    2B)I.   PRINT(2B-          0          16 286331165          3          69 0**** 0 209 0**** 0 206     9535
  880 503107   1    2B)I.   PRINT(2B-          0          16 286331165          3          69 0**** 0 209 0**** 0 206     9536
.....
  876 513139   2    2B)I.   PRINT(2B-          0          16 286331165          3          69 0**** 0 209 0**** 0 206     9538
  907 620  0   2    2B)I.   PRINT(2B-         16 286331165           3         69        3139 0**** 0 209 0**** 0 206     9539
  908 700190   2    2B)I.   PRINT(2B- 286331165          16 286331165          3          69 0**** 0 209 0**** 0 206     9540
  909 030  1   2    2B)I.   PRINT(2B- 286331165          16 286331165          3          69 0**** 0 209 0**** 0 206     9541
  910 600190   2    2B)I.   PRINT(2B-         16 286331165           3         69        3139 0**** 0 209 0**** 0 206     9542
  911 203 16   2    2B)I.   PRINT(2B-          1          16 286331165          3          69 0**** 0 209 0**** 0 206     9543
  912 602190   2    2B)I.   PRINT(2B-          1          16 286331165          3          69 0**** 0 209 0**** 0 206     9544
  913 011  0   3    2B)I.   PRINT(2B-          1          16 286331165          3          69 0**** 0 209 0**** 0 206     9545
  914 001  0   3    2B)I.   PRINT(2B-         17 286331165           3         69        3139 0**** 0 209 0**** 0 206     9546
  915 100151   3    2B)I.   PRINT(2B-          0          17 286331165          3          69 0**** 0 209 0**** 0 206     9547
  916 002151   1    2B)I.   PRINT(2B-          0          17 286331165          3          69 0**** 0 209 0**** 0 206     9548
  917 100143   3    2B)I.   PRINT(2B-        151          17 286331165          3          69 0**** 0 209 0**** 0 206     9549
  919 102142   3    B)I.   PRINT(2B-)        151          17 286331165          3          69 0**** 0 209 0**** 0 206     9550
  920 420244   3    B)I.   PRINT(2B-)        151          17 286331165          3          69 0**** 0 209 0**** 0 206     9551
.....
                                                                  11100111
                                                                  00001001
                                                                  10100101
       COMPILE  76.2:   INK      9
  921 623  0   3    I.   PRINT(2B-)9.        151          17 286331165          3          69 0**** 0 209 0**** 0 206     9592
  922 711202   3    I.   PRINT(2B-)9.         17         151 286331165          3          69 0**** 0 209 0**** 0 206     9593
                                                                  11100110
                                                                  00010001
                                                                  11001010
       COMPILE  76.3:   PNS-     17
  923 301  0   3    I.   PRINT(2B-)9.        151 286331165           3         69        3139 0**** 0 209 0**** 0 206     9594
  924 701185   2    I.   PRINT(2B-)9.        151 286331165           3         69        3139 0**** 0 209 0**** 0 206     9595
                                                                  11100110
                                                                  10010111
                                                                  10111001
       COMPILE  77.0:   PC-P    151
  925 520  3   3    I.   PRINT(2B-)9.        151 286331165           3         69        3139 0**** 0 209 0**** 0 206     9596
.....
  818 421 99   2     T(2B-)9. PRINT Y          3          69        3139           3        1088 0**** 0 209 0**** 0 206     9631
.....
  358 501141   2     T(2B-)9. PRINT Y        819           3          69        3139           3 0**** 0 209 0**** 0 206     9638
  397 001255   2     T(2B-)9. PRINT Y        819           3          69        3139           3 0**** 0 209 0**** 0 206     9639
  398 623  0   2     T(2B-)9. PRINT Y        255         819           3          69        3139 0**** 0 209 0**** 0 206     9640
  399 500157   2     T(2B-)9. PRINT Y        819         255           3          69        3139 0**** 0 209 0**** 0 206     9641
.....
                                                                  11101100
                                                                  11010010
                                                                  01000011
       COMPILE  77.1:   LKBR1   210    Y
                                                                  11101000
                                                                  00000001
                                                                  01000100
       COMPILE  77.2:   LIB      1
  819 100 51   2     )9. PRINT Y LEFT   1048576         255           3          69        3139 1 210 0 209 0**** 0 206     9726
  820 503 55   1     )9. PRINT Y LEFT   1048576         255           3          69        3139 1 210 0 209 0**** 0 206     9727
  823 721 75   1     )9. PRINT Y LEFT   1048576         255           3          69        3139 1 210 0 209 0**** 0 206     9728
                                                                  11100001
                                                                  00000000
                                                                  00100011
       COMPILE  77.3:   MODO     0
                                                                  11100001
                                                                  00000000
                                                                  01001011
       COMPILE  78.0:   PAL1     0
```

```
 824 500   3  1    )9. PRINT Y LEFT            3          69       3139         3        1088 0 210 0 209 0**** 0 206      9729
.....
                                                                01011111
*************** PRINT($ZZZ)10. PRINT($IZZZ)1*1.
                                                                                              *****                     9736
 830 002  8  3              PRINT($             0          3          69       3139         3 0 210 0 209 0**** 0 206   9770
.....
 887 503132  3            PRINT($ZZ            16          8           3         69      3139 0 210 0 209 0**** 0 206   9783
.....
 877 003  1  3             PRINT($ZZZ)          2         48 286332518            3        69 0 210 0 209 0**** 0 206   9927
 878 033  0  3             PRINT($ZZZ)          1         48 286332518            3        69 0 210 0 209 0**** 0 206   9928
 880 503107  2             PRINT($ZZZ)          1         48 286332518            3        69 0 210 0 209 0**** 0 206   9929
.....
 880 503107  3             PRINT($ZZZ)          0         48 286332518            3        69 0 210 0 209 0**** 0 206   9933
.....
 876 513139  3             PRINT($ZZZ)          0         48 286332518            3        69 0 210 0 209 0**** 0 206   9935
 907 620  0  3             PRINT($ZZZ)         48 286332518            3         69      3139 0 210 0 209 0**** 0 206   9936
 908 700190  3             PRINT($ZZZ) 286332518          48 286332518            3        69 0 210 0 209 0**** 0 206   9937
 909 030  2  3             PRINT($ZZZ) 286332518          48 286332518            3        69 0 210 0 209 0**** 0 206   9938
 910 600190  3             PRINT($ZZZ)         48 286332518            3         69      3139 0 210 0 209 0**** 0 206   9939
 911 203 16  3             PRINT($ZZZ)          2         48 286332518            3        69 0 210 0 209 0**** 0 206   9940
 912 602190  3             PRINT($ZZZ)          2         48 286332518            3        69 0 210 0 209 0**** 0 206   9941
.....
 197 500200  2          PRINT($ZZZ)10           0          1         215        245       921 0 210 0 209 0**** 0 206   9972
 200 623  0  2          PRINT($ZZZ)10           0          1         215        245       921 0 210 0 209 0**** 0 206   9973
 201 012  1  2          PRINT($ZZZ)10           1          0         215        245       921 0 210 0 209 0**** 0 206   9974
 202 011  0  2          PRINT($ZZZ)10          16          0         215        245       921 0 210 0 209 0**** 0 206   9975
 203 400 68  2          PRINT($ZZZ)10          16        215         245        921         0 0 210 0 209 0**** 0 206   9976
.....
 205 402 46  2        PRINT($ZZZ)10.           16        215         245        921         0 0 210 0 209 0**** 0 206   9983
.....
                                                                10100001
     COMPILE CONSTANT IN LOCATION 1.197         0  0  0  0    0   0   0    0  0  0  0  0  0  0  1  0
                                                                11000101
                                                                00010000
                                                                00000000
                                                                00000000
                                                                00000000
                                                                00000000
                                                                00000000
                                                                00000000
                                                                00000000
                                                                00000000
                                                                01011001
                                                                01100110
                                                                01001110
                                                                11000101
                                                                11011101
      COMPILE   78.1:   TRA1   197

                                                                11100101
                                                                00110010
                                                                11001010
      COMPILE   78.2:   PNS-      50
 848 513135  2     ZZZ)10. PRINT($I             3         16           8          3        69 0 210 0 209 0**** 0 206   10139
.....
 879 503145  2    10. PRINT($IZZZ)              2         64 286340710            3        69 0 210 0 209 0**** 0 206   10291
.....
 218 001229  3    . PRINT($IZZZ)1*              1          1         245        921         0 0 210 0 209 0**** 0 206   10323
.....
                                                                11100111
                                                                00000000
                                                                10100100
      COMPILE   78.3:   LSR      0

                                                                11101110
                                                                00000001
                                                                10100101
      COMPILE   79.0:   INK        1
 230 402 46  2    PRINT($IZZZ)1*1.              1        229           1          1       245 0 210 0 209 0**** 0 206   10360
.....
                                                                01011110
                                                                10100001
     COMPILE CONSTANT IN LOCATION 1.196         0  0  0  0    0   0   0    0  0  0  0  0  0  0  1
                                                                11000100
                                                                00000001
                                                                00000000
                                                                00000000
                                                                00000000
                                                                00000000
                                                                00000000
                                                                00000000
                                                                00000000
                                                                00000000
                                                                00000000
                                                                01011000
                                                                01100110
```

```
                                                                    01001111
                                                                    11000100
                                                                    11100101
        COMPILE  79.1:   MUL1   196
                                                                    11101110
                                                                    01000010
                                                                    11001010
        COMPILE  79.2:   PNS=    66
                                                                    01010000
*************** CODE(11111111,N). CODE(00110011,X(X(N))).                                          *****            10468
  54 513204  1             CODE        0          3         69      3139        3 0 210 0 209 0**** 0 206      10494
 972 102174  1             CODE        3         69       3139         3     1088 0 210 0 209 0**** 0 206      10495
 973 423195  1            CODE(        3         69       3139         3     1088 0 210 0 209 0**** 0 206      10496
 963 001  0  1            CODE(      974          3         69      3139        3 0 210 0 209 0**** 0 206      10497
 964 601115  1            CODE(        0        974          3        69     3139 0 210 0 209 0**** 0 206      10498
 965 413186  1            CODE(        0        974          3        69     3139 0 210 0 209 0**** 0 206      10499
 954 623  0  1            CODE(      966          0        974         3       69 0 210 0 209 0**** 0 206      10500
 955 710  0  1            CODE(        0        966        974         3       69 0 210 0 209 0**** 0 206      10501
 956 002  0  1            CODE(        0        966        974         3       69 0 210 0 209 0**** 0 206      10502
 957 100128  1            CODE(        0        966        974         3       69 0 210 0 209 0**** 0 206      10503
 959 101129  1           CODE(1        0        966        974         3       69 0 210 0 209 0**** 0 206      10504
 961 002  1  1           CODE(1        0        966        974         3       69 0 210 0 209 0**** 0 206      10505
 962 712  0  1           CODE(1        1        966        974         3       69 0 210 0 209 0**** 0 206      10506
 967 602115  1           CODE(1        1        974          3        69     3139 0 210 0 209 0**** 0 206      10507
 968 600115  1           CODE(1        1        974          3        69     3139 0 210 0 209 0**** 0 206      10508
 969 310  8  1           CODE(1        1          1        974         3       69 0 210 0 209 0**** 0 206      10509
 971 503197  1           CODE(1        1        974          3        69     3139 0 210 0 209 0**** 0 206      10510
 965 413186  2           CODE(1        1        974          3        69     3139 0 210 0 209 0**** 0 206      10511
 954 623  0  2           CODE(1      966          1        974         3       69 0 210 0 209 0**** 0 206      10512
 955 710  0  2           CODE(1        1        966        974         3       69 0 210 0 209 0**** 0 206      10513
 956 002  1  2           CODE(1        1        966        974         3       69 0 210 0 209 0**** 0 206      10514
 957 100128  2           CODE(1        2        966        974         3       69 0 210 0 209 0**** 0 206      10515
 959 101129  2          CODE(11        2        966        974         3       69 0 210 0 209 0**** 0 206      10516
 961 002  1  2          CODE(11        2        966        974         3       69 0 210 0 209 0**** 0 206      10517
 962 712  0  2          CODE(11        3        966        974         3       69 0 210 0 209 0**** 0 206      10518
 967 602115  2          CODE(11        3        974          3        69     3139 0 210 0 209 0**** 0 206      10519
 968 600115  2          CODE(11        3        974          3        69     3139 0 210 0 209 0**** 0 206      10520
 969 310  8  2          CODE(11        2          3        974         3       69 0 210 0 209 0**** 0 206      10521
 971 503197  2          CODE(11        3        974          3        69     3139 0 210 0 209 0**** 0 206      10522
 965 413186  3          CODE(11        3        974          3        69     3139 0 210 0 209 0**** 0 206      10523
 954 623  0  3          CODE(11      966          3        974         3       69 0 210 0 209 0**** 0 206      10524
 955 710  0  3          CODE(11        3        966        974         3       69 0 210 0 209 0**** 0 206      10525
 956 002  3  3          CODE(11        3        966        974         3       69 0 210 0 209 0**** 0 206      10526
 957 100128  3          CODE(11        6        966        974         3       69 0 210 0 209 0**** 0 206      10527
 959 101129  3         CODE(111        6        966        974         3       69 0 210 0 209 0**** 0 206      10528
 961 002  1  3         CODE(111        6        966        974         3       69 0 210 0 209 0**** 0 206      10529
 962 712  0  3         CODE(111        7        966        974         3       69 0 210 0 209 0**** 0 206      10530
 967 602115  3         CODE(111        7        974          3        69     3139 0 210 0 209 0**** 0 206      10531
 968 600115  3         CODE(111        7        974          3        69     3139 0 210 0 209 0**** 0 206      10532
 969 310  8  3         CODE(111        3          7        974         3       69 0 210 0 209 0**** 0 206      10533
 971 503197  3         CODE(111        7        974          3        69     3139 0 210 0 209 0**** 0 206      10534

••970 712  0  1     CODE(11111111      255        974          3        69     3139 0 210 0 209 0**** 0 206      10594
 974 102148  1      CODE(11111111      255          3         69      3139        3 0 210 0 209 0**** 0 206      10595
 975 413195  1     CODE(11111111,      255          3         69      3139        3 0 210 0 209 0**** 0 206      10596
 963 001  0  2     CODE(11111111,      976        255          3        69     3139 0 210 0 209 0**** 0 206      10597
 964 601115  2     CODE(11111111,        0        976        255         3       69 0 210 0 209 0**** 0 206      10598

••960 510156  1    CODE(11111111,N        0        966        976       255        3 0 210 0 209 0**** 0 206      10605

••966 703  0  1    CODE(11111111,N      976        255          3        69     3139 0 210 0 209 0**** 0 206      10607
 976 402 66  1     CODE(11111111,N      255          3         69      3139        3 0 210 0 209 0**** 0 206      10608
 578 410192  1     CODE(11111111,N      977        255          3        69     3139 0 210 0 209 0**** 0 206      10609

••580 310  1  1   CODE(11111111,N)        0   13631488        977       255        3 0 210 0 209 0**** 1 206      10657
 582 502 77  1    CODE(11111111,N) 13631488        977        255         3       69 0 210 0 209 0**** 1 206      10658
 589 712  0  1    CODE(11111111,N) 13631488        977        255         3       69 0 210 0 209 0**** 1 206      10659
 977 102142  1    CODE(11111111,N) 13631488        255          3        69     3139 0 210 0 209 0**** 1 206      10660
 978 401 85  1    CODE(11111111,N) 13631488        255          3        69     3139 0 210 0 209 0**** 1 206      10661

••979 503170  1   CODE(11111111,N) 13631488        255          3        69     3139 0   0 0   0 0    0 1   0      10668
 938 720  0  1    CODE(11111111,N) 13631488        255          3        69     3139 0   0 0   0 0    0 1   0      10669
 939 721255  1    CODE(11111111,N) 13631488        255          3        69     3139 0   0 0   0 0    0 1   0      10670
                                                                    01101110
                                                                    01001111
                                                                    00000000
                                                                    00101111
        COMPILE  79.3:   MOD3     0
                                                                    11101000
                                                                    00000000
                                                                    11111111
```

```
        COMPILE  80.0:   STOP     0
  940 500   3  1   CODE(11111111,N)          3        69      3139         3      1088 0   0 0   0 0   0 0   0   10671
.....
   54 513204  2   1111111,N). CODE          0         3        69      3139         3 0   0 0   0 0   0 0   0   10704
  972 102174  2   1111111,N). CODE          3        69      3139         3      1088 0   0 0   0 0   0 0   0   10705
  973 423195  2   111111,N). CODE(          3        69      3139         3      1088 0   0 0   0 0   0 0   0   10706
  963 001   0 3   111111,N). CODE(        974         3        69      3139         3 0   0 0   0 0   0 0   0   10707
  964 601115  3   111111,N). CODE(          0       974         3        69      3139 0   0 0   0 0   0 0   0   10708
.....
  958 712   0 1   11111,N). CODE(0          0       966       974         3        69 0   0 0   0 0   0 0   0   10714
.....
  958 712   0 2   1111,N). CODE(00          0       966       974         3        69 0   0 0   0 0   0 0   0   10724
.....
  958 712   0 3   1,N). CODE(00110          6       966       974         3        69 0   0 0   0 0   0 0   0   10758
.....
  970 712   0 2   ). CODE(00110011         51       974         3        69      3139 0   0 0   0 0   0 0   0   10796
  974 102148  2   ). CODE(00110011         51         3        69      3139         3 0   0 0   0 0   0 0   0   10797
  975 413195  2   . CODE(00110011,         51         3        69      3139         3 0   0 0   0 0   0 0   0   10798
.....
  960 510156  2    CODE(00110011,X          0       966       976        51         3 0   0 0   0 0   0 0   0   10807
.....
  966 703   0 2    CODE(00110011,X        976        51         3        69      3139 0   0 0   0 0   0 0   0   10809
  976 402  66 2    CODE(00110011,X         51         3        69      3139         3 0   0 0   0 0   0 0   0   10810
  578 410192  2    CODE(00110011,X        977        51         3        69      3139 0   0 0   0 0   0 0   0   10811
.....

        COMPILE  80.1:   LKBR1  211   X

        COMPILE  80.2:   LIB     13

        COMPILE  80.3:   LKBR1  206   N

        COMPILE  81.0:   LIB     9

        COMPILE  81.1:   MOD2    0

        COMPILE  81.2:   TRA1    0

        COMPILE  81.3:   TAIR    5

        COMPILE  82.0:   MOD3    0

        COMPILE  82.1:   MOD1    0

        COMPILE  82.2:   TRA1  255

        COMPILE  82.3:   TAIR    1
  580 310   1  2   00110011,X(X(N))          0  13697279       977        51         3 1**** 0**** 0 206 1 211   11155
  582 502  77  2   00110011,X(X(N))   13697279       977        51         3        69 1**** 0**** 0 206 1 211   11156
  589 712   0 2   00110011,X(X(N))   13697279       977        51         3        69 1**** 0**** 0 206 1 211   11157
  977 102142  2   00110011,X(X(N))   13697279        51         3        69      3139 1**** 0**** 0 206 1 211   11158
  978 401  85 2   0110011,X(X(N)))   13697279        51         3        69      3139 1**** 0**** 0 206 1 211   11159
.....
  979 503170  2   0110011,X(X(N)))   13697279        51         3        69      3139 1   0 0   0 0   0 1   0   11166
  938 720   0 2   0110011,X(X(N)))   13697279        51         3        69      3139 1   0 0   0 0   0 1   0   11167
  939 721  51 2   0110011,X(X(N)))   13697279        51         3        69      3139 1   0 0   0 0   0 1   0   11168

11100000
11010011
01000011

11101001
00001101
01000100

11101101
11001110
01000011

11100101
00001001
01000100

11101001
00000000
00101011

11101001
00000000
11011101

11100000
00000101
10100111

11101000
00000000
00101111

11101101
00000000
00100111

11100101
11111111
11011101

11100000
00000001
10100111

11101100
00000000
00101111
```

```
        COMPILE  83.0:   MOD3     0
                                                                   11101101
                                                                   00000000
                                                                   00100011
        COMPILE  83.1:   MODO     0
                                                                   11100001
                                                                   11111111
                                                                   00110011
        COMPILE  83.2:   LODA   255
  940 500  3  2   0110011,X(X(N)))        3        69        3139        3        1088 0    0 0    0 0    0 0     0      11169
.....
                                                                   01010000
*************** CODE(10000000,00000001).  CODE(00000000,L1).                                     *****              11176
   54 513204  3                 CODE      0         3          69      3139          3 0    0 0    0 0    0 0     0      11202
  972 102174  3                 CODE      3        69        3139         3       1088 0    0 0    0 0    0 0     0      11203
  973 423195  3                 CODE(     3        69        3139         3       1088 0    0 0    0 0    0 0     0      11204
.....
  970 712  0  3        CODE(10000000    128       974           3        69       3139 0    0 0    0 0    0 0     0      11288
  974 102148  3        CODE(10000000    128         3          69      3139          3 0    0 0    0 0    0 0     0      11289
  975 413195  3       CODE(10000000,    128         3          69      3139          3 0    0 0    0 0    0 0     0      11290
.....
  977 102142  3    0000000,00000001       1       128           3        69       3139 0    0 0    0 0    0 0     0      11375
  978 401 85  3    000000,00000001)       1       128           3        69       3139 0    0 0    0 0    0 0     0      11376
.....
  979 503170  3    000000,00000001)       1       128           3        69       3139 0    0 0    0 0    0 0     0      11383
  938 720  0  3    000000,00000001)       1       128           3        69       3139 0    0 0    0 0    0 0     0      11384
  939 721128  3    000000,00000001)       1       128           3        69       3139 0    0 0    0 0    0 0   . 0      11385
                                                                   01101110
                                                                   01010011
                                                                   00000001
                                                                   10000000
        COMPILE  83.3:   SRJ00      1
  940 500  3  3    000000,00000001)       3        69        3139         3       1088 0    0 0    0 0    0 0     0      11386
.....
  960 510156  3    CODE(00000000,L1       0       966         976         0          3 0    0 0    0 0    0 0     0      11514
.....
  966 703  0  3    CODE(00000000,L1     976         0           3        69       3139 0    0 0    0 0    0 0     0      11516
  976 402 66  3    CODE(00000000,L1       0         3          69      3139          3 0    0 0    0 0    0 0     0      11517
  578 410192  3    CODE(00000000,L1     977         0           3        69       3139 0    0 0    0 0    0 0     0      11518
.....
  579 502 71  1    CODE(00000000,L1     977         0           3        69       3139 0    0 0    0 0    0 0     0      11530
  583 411 99  1    CODE(00000000,L1     977         0           3        69       3139 0    0 0    0 0    0 0     0      11531
.....
  359 101154  3    CODE(00000000,L1     584       977           0         3         69 0    0 0    0 0    0 0     0      11538
  360 703  0  1    CODE(00000000,L1     584       977           0         3         69 0    0 0    0 0    0 0     0      11539
  584 502 75  1    CODE(00000000,L1     977         0           3        69       3139 0    0 0    0 0    0 0     0      11540
  587 102106  1    CODE(00000000,L1     977         0           3        69       3139 0    0 0    0 0    0 0     0      11541
  588 600180  1    CODE(00000000,L1     977         0           3        69       3139 0    0 0    0 0    0 0     0      11542
  589 712  0  3    CODE(00000000,L1     204       977           0         3         69 0    0 0    0 0    0 0     0      11543
.....
                                                                   11100001
                                                                   11001100
                                                                   00000000
        COMPILE  84.0:   STOP   204   L1
                                                                   01010000
*************** IF(P(I)=Q(I)), CODE(11000011,P(I)).                                               *****              11562
  447 421189  2                 IF(     494         0           3        69       3139 0    0 0    0 0    0 0     0      11591
.....
                                                                   01100110
                                                                   01010100
                                                                   11111110
                                                                   11011101
        COMPILE  84.1:   TRA1   254   I
                                                                   11100110
                                                                   00001101
                                                                   10100111
        COMPILE  84.2:   TAIR    13
                                                                   11100000
                                                                   00000000
                                                                   00101111
        COMPILE  84.3:   MOD3     0
                                                                   11101101
                                                                   11110000
                                                                   11011101
        COMPILE  85.0:   TRA1   240   A
  454 401 18  3     IF(P(I)=            448       494           0         3         69 0    0 0    0 0    0 0   254      11690
.....
                                                                   11101111
                                                                   00000000
                                                                   00101111
        COMPILE  85.1:   MOD3     0
```

```
                                                                      11101101
                                                                      11110000
                                                                      11100011
         COMPILE   85.2:    SUA1    240    A
  458 501205   3       IF(P(I)=Q(I))       448       494          0         3        69 0    0 0    0 0    0 0 254     11768
  461 401 35   3       IF(P(I)=Q(I))       448       494          0         3        69 0    0 0    0 0    0 0 254     11769
.....
  462 001 17   3       IF(P(I)=Q(I))       448       494          0         3        69 0    0 0    0 0    0 0 254     11773
  463 001  1   3       IF(P(I)=Q(I))        17       448        494         0         3 0    0 0    0 0    0 0 254     11774
  464 722  0   3       IF(P(I)=Q(I))         1        17        448       494         0 0    0 0    0 0    0 0 254     11775
  448 102142   2       IF(P(I)=Q(I))         1        17        494         0         3 0    0 0    0 0    0 0 254     11776
  449 722  0   2       IF(P(I)=Q(I))         1        17        494         0         3 0    0 0    0 0    0 0 254     11777
.....
                                                                      11100010
                                                                      00010001
                                                                      00000001
         COMPILE   85.3:    SKL      17
                                                                      11100001
                                                                      00000010
                                                                      00000000
         COMPILE   86.0:    STOP      2
  580 310  1   3    DE(11000011,P(I)         0    852208        977       195         2 0    0 0    0 0    0 1 254     11984
  582 502 77   3    DE(11000011,P(I)    852208       977        195         2        86 0    0 0    0 0    0 1 254     11985
.....
                                                                      11100010
                                                                      00000000
                                                                      00101111
         COMPILE   86.1:    MOD3      0
                                                                      11101101
                                                                      11110000
                                                                      11000011
         COMPILE   86.2:    PKA     240    A
                                                                      01010000
                                                                      01100000
        FIXUP LOCATION  86.0
                                                                      01010110
                                                                      01010110
                                                                      00101100
                                                                      01011110
*************** CODE(00000000,"""").  GO TO #.  GO TO ##.  GO TO L1.                           *****                 12035
  579 502 71   2      CODE(00000000,"      977         0          3        69      3139 0    0 0    0 0    0 0     0     12173
  583 411 99   2      CODE(00000000,"      977         0          3        69      3139 0    0 0    0 0    0 0     0     12174
.....
  361 001  0   3      CODE(00000000,"      584       977          0         3        69 0    0 0    0 0    0 0     0     12182
  362 601155   3      CODE(00000000,"        0       584        977         0         3 0    0 0    0 0    0 0     0     12183
.....
  384 501121   3    CODE(00000000,""         0         0        584       977         0 0    0 0    0 0    0 0     0     12195
  377 620  0   3    CODE(00000000,""         0         0        584       977         0 0    0 0    0 0    0 0     0     12196
  378 311  0   3    CODE(00000000,""         0         0          0       584       977 0    0 0    0 0    0 0     0     12197
  380 002154   2    CODE(00000000,""         0         0        584       977         0 0    0 0    0 0    0 0     0     12198
  381 501117   2    CODE(00000000,""       154         0        584       977         0 0    0 0    0 0    0 0     0     12199
.....
  385 042  2   3    ODE(00000000,"""       154         0        584       977         0 0    0 0    0 0    0 0     0     12213
  386 300  0   3    ODE(00000000,"""         0         0        584       977         0 0    0 0    0 0    0 0     0     12214
  387 501129   2    ODE(00000000,"""         0         0        584       977         0 0    0 0    0 0    0 0     0     12215
.....
  387 501129   3    ODE(00000000,"""         0         0        584       977         0 0    0 0    0 0    0 0     0     12218
.....
                                                                      10100001
        COMPILE CONSTANT IN LOCATION 1.195       0   0   0   0   0   0   0   0   0   0   0   0   0   0   9 10
                                                                      11000011
                                                                      10011010
                                                                      00000000
                                                                      00000000
                                                                      00000000
                                                                      00000000
                                                                      00000000
                                                                      00000000
                                                                      00000000
                                                                      01011101
  393 511138   3    ODE(00000000,"""         0       584        977         0         3 0    0 0    0 0    0 0     0     12320
  394 600155   3    ODE(00000000,"""       584       977          0         3        69 0    0 0    0 0    0 0     0     12321
  395 600125   3    ODE(00000000,"""         1       584        977         0         3 0    0 0    0 0    0 0     0     12322
  396 722  0   3    ODE(00000000,"""       195         1        584       977         0 0    0 0    0 0    0 0     0     12323
  585 623  0   1    ODE(00000000,"""       195         1        977         0         3 0    0 0    0 0    0 0     0     12324
  586 512 77   1    ODE(00000000,"""         1       195        977         0         3 0    0 0    0 0    0 0     0     12325
.....
                                                                      01101110
                                                                      01010110
                                                                      11000011
                                                                      00000000
```

```
        COMPILE   86.3:    STOP    195
 57 512 10   1    000000,""").   GO        0        3       69     3139        3 0   0 0   0 0   0 0   0    12371
522 102 57   1    000000,""").   GO        3       69     3139        3     1088 0   0 0   0 0   0 0   0    12372
523 101141   1    000,""").   GO TO        3       69     3139        3     1088 0   0 0   0 0   0 0   0    12373
525 001  1   1    0,""").   GO TO #        3       69     3139        3     1088 0   0 0   0 0   0 0   0    12374
526 100141   1    0,""").   GO TO #        1        3       69     3139        3 0   0 0   0 0   0 0   0    12375
528 711 72   1    ,""").   GO TO #.        1        3       69     3139        3 0   0 0   0 0   0 0   0    12376
                                                       11100010
                                                       00000001
                                                       01001000
        COMPILE   87.0:    RETRN     1
529 500  3   1    ,""").   GO TO #.        3       69     3139        3     1088 0   0 0   0 0   0 0   0    12377
.....
 57 512 10   2    ).  GO TO #.  GO         0        3       69     3139        3 0   0 0   0 0   0 0   0    12410
522 102 57   2    ).  GO TO #.  GO         3       69     3139        3     1088 0   0 0   0 0   0 0   0    12411
523 101141   2     GO TO #.  GO TO         3       69     3139        3     1088 0   0 0   0 0   0 0   0    12412
525 001  1   2    O TO #.  GO TO #         3       69     3139        3     1088 0   0 0   0 0   0 0   0    12413
526 100141   2    O TO #.  GO TO #         1        3       69     3139        3 0   0 0   0 0   0 0   0    12414
527 002254   1     TO #.  GO TO ##         1        3       69     3139        3 0   0 0   0 0   0 0   0    12415
528 711 72   2     TO #.  GO TO ##       255        3       69     3139        3 0   0 0   0 0   0 0   0    12416
                                                       11101101
                                                       11111111
                                                       01001000
        COMPILE   87.1:    RETRN   255
529 500  3   2     TO #.  GO TO ##         3       69     3139        3     1088 0   0 0   0 0   0 0   0    12417
.....
 57 512 10   3    .  GO TO ##.  GO         0        3       69     3139        3 0   0 0   0 0   0 0 · 0    12450
522 102 57   3    .  GO TO ##.  GO         3       69     3139        3     1088 0   0 0   0 0   0 0   0    12451
523 101141   3    GO TO ##.  GO TO         3       69     3139        3     1088 0   0 0   0 0   0 0   0    12452
524 502 18   1    TO ##.  GO TO L1         3       69     3139        3     1088 0   0 0   0 0   0 0   0    12453
530 100106   1    TO ##.  GO TO L1         3       69     3139        3     1088 0   0 0   0 0   0 0   0    12454
531 410164   1    TO ##.  GO TO L1         3       69     3139        3     1088 0   0 0   0 0   0 0   0    12455
.....
533 711 33   1    O ##.  GO TO L1.       204        3       69     3139        3 0   0 0   0 0   0 0   0    12459
                                                       11101100
                                                       11001100
                                                       00100001
        COMPILE   87.2:    BRU01  204    L1
534 500  3   1    O ##.  GO TO L1.         3       69     3139        3     1088 0   0 0   0 0   0 0   0    12460
.....
                                                       01010011
*************** IF KEY(4), GO TO L1.  IF KEY(2)GO TO L.                                     *****           12467
472 001 10   2                IF KEY     494        0        3       69     3139 0   0 0   0 0   0 0   0    12515
473 102174   3                IF KEY      10      494        0        3       69 0   0 0   0 0   0 0   0    12516
474 420 77   3               IF KEY(      10      494        0        3       69 0   0 0   0 0   0 0   0    12517
.....
475 203  5   3              IF KEY(4)      4       10      494        0        3 0   0 0   0 0   0 0   0    12535
476 102142   3              IF KEY(4)      4       10      494        0        3 0   0 0   0 0   0 0   0    12536
477 700  0   3              IF KEY(4)      4       10      494        0        3 0   0 0   0 0   0 0   0    12537
.....
497 501244   1        IF KEY(4), GO       10       17        0        3       69 0   0 0   0 0   0 0   0    12544
500 102 57   1        IF KEY(4), GO       10       17        0        3       69 0   0 0   0 0   0 0   0    12545
501 100106   1    IF KEY(4), GO TO        10       17        0        3       69 0   0 0   0 0   0 0   0    12546
502 501249   1    KEY(4), GO TO L1        10       17        0        3       69 0   0 0   0 0   0 0   0    12547
505 630  0   1    KEY(4), GO TO L1        10       17        0        3       69 0   0 0   0 0   0 0   0    12548
506 211  8   1    KEY(4), GO TO L1         0       10       17        0        3 0   0 0   0 0   0 0   0    12549
507 002  4   1    KEY(4), GO TO L1        10       17        0        3       69 0   0 0   0 0   0 0   0    12550
508 700  0   1    KEY(4), GO TO L1        14       17        0        3       69 0   0 0   0 0   0 0   0    12551
509 721 14   1    KEY(4), GO TO L1        17        0        3       69     3139 0   0 0   0 0   0 0   0    12552
                                                       01101110
                                                       01010111
                                                       00010001
                                                       00001110
        COMPILE   87.3:    EXK      17
510 502 19   1    KEY(4), GO TO L1         3       69     3139        3     1088 0   0 0   0 0   0 0   0    12553
531 410164   2    KEY(4), GO TO L1         3       69     3139        3     1088 0   0 0   0 0   0 0   0    12554
.....
533 711 33   2    EY(4), GO TO L1.       204        3       69     3139        3 0   0 0   0 0   0 0   0    12558
                                                       11100010
                                                       11001100
                                                       00100001
        COMPILE   88.0:    BRU01  204    L1
534 500  3   2    EY(4), GO TO L1.         3       69     3139        3     1088 0   0 0   0 0   0 0   0    12559
.....
472 001 10   3    O TO L1.  IF KEY       494        0        3       69     3139 0   0 0   0 0   0 0   0    12614
.....
495 501240   2    L1.  IF KEY(2)GO        10       20        0        3       69 0   0 0   0 0   0 0   0    12642
.....
497 501244   2    L1.  IF KEY(2)GO        10       20        0        3       69 0   0 0   0 0   0 0   0    12644
500 102 57   2    L1.  IF KEY(2)GO        10       20        0        3       69 0   0 0   0 0   0 0   0    12645
501 100106   2      IF KEY(2)GO TO        10       20        0        3       69 0   0 0   0 0   0 0   0    12646
```

```
  503 401255  1    IF KEY(2)GO TO L          10         20          0          3          69 0   0 0   0 0   0 0   0    12647
.....
                                                                 11100011
                                                                 00010100
                                                                 00001010
        COMPILE  88.1:   SKK      20
                                                                 11101111
                                                                 00000010
                                                                 00000000
        COMPILE  88.2:   STOP      2
  504 502 11  1    IF KEY(2)GO TO L           2       2136          3          69       3139 0   0 0   0 0   0 0   0    12658
.....
  524 502 18  2    IF KEY(2)GO TO L           2       2136          3          69       3139 0   0 0   0 0   0 0   0    12660
  530 100106  2    IF KEY(2)GO TO L           2       2136          3          69       3139 0   0 0   0 0   0 0   0    12661
  532 420155  1    IF KEY(2)GO TO L           2       2136          3          69       3139 0   0 0   0 0   0 0   0    12662
.....
                                                                 11100010
                                                                 11010000
                                                                 01000011
        COMPILE  88.3:   LKBR1   208   L
                                                                 11101010
                                                                 00001101
                                                                 01000100
        COMPILE  89.0:   LIB      13
  533 711 33  3    F KEY(2)GO TO L.    13631488          2        2136          3          69 0   0 0   0 0   0 1 208    12717
                                                                 11101101
                                                                 00000000
                                                                 00101111
        COMPILE  89.1:   MOD3      0
                                                                 11101101
                                                                 00000000
                                                                 00100001
        COMPILE  89.2:   BRU01     0
  534 500  3  3    F KEY(2)GO TO L.           2       2136          3          69       3139 0   0 0   0 0   0 0 208    12718
.....
                                                                 01010011
                                                                 01101000
      FIXUP LOCATION  88.2
                                                                 01011000
                                                                 01011001
                                                                 00101100
                                                                 01010111
**************** GO TO L.  UNLESS X=R(X), GO TO ##.                                                                  *****          12755
  524 502 18  3              GO TO L             3          69        3139          3       1088 0   0 0   0 0   0 0   0    12784
  530 100106  3              GO TO L             3          69        3139          3       1088 0   0 0   0 0   0 0   0    12785
  532 420155  2              GO TO L             3          69        3139          3       1088 0   0 0   0 0   0 0   0    12786
.....
                                                                 01101110
                                                                 01011001
                                                                 11010000
                                                                 01000011
        COMPILE  89.3:   LKBR1   208   L
                                                                 11101000
                                                                 00001101
                                                                 01000100
        COMPILE  90.0:   LIB      13
                                                                 11101101
                                                                 00000000
                                                                 00101111
        COMPILE  90.1:   MOD3      0
                                                                 11101101
                                                                 00000000
                                                                 00100001
        COMPILE  90.2:   BRU01     0
                                                                 11100011
                                                                 11010011
                                                                 01000011
        COMPILE  90.3:   LKBR1   211   X
                                                                 11101001
                                                                 00001001
                                                                 01000100
        COMPILE  91.0:   LIB       9
                                                                 11101001
                                                                 00000000
                                                                 00101011
        COMPILE  91.1:   MOD2      0
                                                                 11101001
                                                                 00000000
                                                                 11011101
        COMPILE  91.2:   TRA1      0
                                                                 11100000
```

```
                                                                   11111111
                                                                   11011001
        COMPILE  91.3:   TRM1   255
                                                                   11100100
                                                                   00000000
                                                                   00101011
        COMPILE  92.0:   MOD2     0
                                                                   11101001
                                                                   00000000
                                                                   11011101
        COMPILE  92.1:   TRA1     0
                                                                   11100000
                                                                   00000101
                                                                   10100111
        COMPILE  92.2:   TAIR     5
  294 001255  3     UNLESS X=R(X),     277         0    327920       455      494 0   0 1**** 0 211 0 208    13116
  295 711221  3     UNLESS X=R(X),     255       277         0    327920      455 0   0 1**** 0 211 0 208    13117
                                                                   11101000
                                                                   11111111
                                                                   11011101
        COMPILE  92.3:   TRA1   255
  296 001  1  3     UNLESS X=R(X),     277         0    327920       455      494 0   0 1**** 0 211 0 208    13118
  297 501 33  3     UNLESS X=R(X),       1       277         0    327920      455 0   0 1**** 0 211 0 208    13119
.....
                                                                   11100000
                                                                   00000000
                                                                   00100111
        COMPILE  93.0:   MOD1     0
                                                                   11100101
                                                                   11110000
                                                                   11100011
        COMPILE  93.1:   SUA1   240    A
  497 501244  3   NLESS X=R(X), GO       1        17         8         3       69 0   0 0**** 0 211 0 208    13138
  500 102 57  3   NLESS X=R(X), GO       1        17         8         3       69 0   0 0**** 0 211 0 208    13139
  501 100106  3   SS X=R(X), GO TO       1        17         8         3       69 0   0 0**** 0 211 0 208    13140
  503 401255  2    X=R(X), GO TO #       1        17         8         3       69 0   0 0**** 0 211 0 208    13141
.....
                                                                   11100010
                                                                   00010001
                                                                   00000101
        COMPILE  93.2:   EXL     17
                                                                   11100101
                                                                   00000010
                                                                   00000000
        COMPILE  93.3:   STOP     2
  504 502 11  2    X=R(X), GO TO #       2      3165         3        69     3139 0   0 0**** 0 211 0 208    13153
.....
  525 001  1  3    X=R(X), GO TO #       2      3165         3        69     3139 0   0 0**** 0 211 0 208    13155
  526 100141  3    X=R(X), GO TO #       1         2      3165         3       69 0   0 0**** 0 211 0 208    13156
  527 002254  2   X=R(X), GO TO ##       1         2      3165         3       69 0   0 0**** 0 211 0 208    13157
  528 711 72  3   X=R(X), GO TO ##     255         2      3165         3       69 0   0 0**** 0 211 0 208    13158
                                                                   11100010
                                                                   11111111
                                                                   01001000
        COMPILE  94.0:   RETRN  255
  529 500  3  3   X=R(X), GO TO ##       2      3165         3        69     3139 0   0 0**** 0 211 0 208    13159
.....
                                                                   01011100
                                                                   01101100
      FIXUP LOCATION  93.3
                                                                   01011101
                                                                   01011110
                                                                   00100100
                                                                   01011001
*************** ADVANCE LEFT 5. ADVANCE RIGHT TO 5. ADVANCE TO 25.                            *****         13196
   48 503160  1            ADVANCE       0         3        69      3139        3 0   0 0   0 0   0 0   0   13222
  928 403173  1            ADVANCE       0         3        69      3139        3 0   0 0   0 0   0 0   0   13223
  941 100 51  1            ADVANCE     929         0         3        69     3139 0   0 0   0 0   0 0   0   13224
  942 702  0  1       ADVANCE LEFT     929         0         3        69     3139 0   0 0   0 0   0 0   0   13225
  929 002245  1       ADVANCE LEFT       0         3        69      3139        3 0   0 0   0 0   0 0   0   13226
  930 100 57  1       ADVANCE LEFT     245         3        69      3139        3 0   0 0   0 0   0 0   0   13227
  932 503169  1     ADVANCE LEFT 5     245         3        69      3139        3 0   0 0   0 0   0 0   0   13228
  937 420 77  1     ADVANCE LEFT 5     245         3        69      3139        3 0   0 0   0 0   0 0   0   13229
.....
                                                                   01100110
                                                                   01011110
                                                                   00000101
                                                                   11110101
        COMPILE  94.1:   AL       5
   48 503160  2    LEFT 5. ADVANCE       0         3        69      3139        3 0   0 0   0 0   0 0   0   13282
  928 403173  2    LEFT 5. ADVANCE       0         3        69      3139        3 0   0 0   0 0   0 0   0   13283
```

```
  941  100  51   2     LEFT 5. ADVANCE          929          0          3          69        3139  0     0 0     0 0     0 0     0    13284
  943  100  52   1  5. ADVANCE RIGHT            929          0          3          69        3139  0     0 0     0 0     0 0     0    13285
  944  622   0   1  5. ADVANCE RIGHT            929          0          3          69        3139  0     0 0     0 0     0 0     0    13286
  945  702   0   1  5. ADVANCE RIGHT            929          1          3          69        3139  0     0 0     0 0     0 0     0    13287
  929  002245   2  5. ADVANCE RIGHT              1          3         69        3139           3  0     0 0     0 0     0 0     0    13288
  930  100  57   2  5. ADVANCE RIGHT            246          3         69        3139           3  0     0 0     0 0     0 0     0    13289
  931  003   4   1  ADVANCE RIGHT TO            246          3         69        3139           3  0     0 0     0 0     0 0     0    13290
  932  503169   2  ADVANCE RIGHT TO            242          3         69        3139           3  0     0 0     0 0     0 0     0    13291
  937  420  77   2  ADVANCE RIGHT TO            242          3         69        3139           3  0     0 0     0 0     0 0     0    13292
.....
                                                                                                                                  11100010
                                                                                                                                  00000101
                                                                                                                                  11110010
        COMPILE  94.2:   ARTO     5
   48  503160   3  HT TO 5. ADVANCE              0          3         69        3139           3  0     0 0     0 0     0 0     0    13345
  928  403173   3  HT TO 5. ADVANCE              0          3         69        3139           3  0     0 0     0 0     0 0     0    13346
  941  100  51   3  HT TO 5. ADVANCE            929          0          3          69        3139  0     0 0     0 0     0 0     0    13347
  943  100  52   2  TO 5. ADVANCE TO            929          0          3          69        3139  0     0 0     0 0     0 0     0    13348
  945  702   0   2  TO 5. ADVANCE TO            929          0          3          69        3139  0     0 0     0 0     0 0     0    13349
  929  002245   3  TO 5. ADVANCE TO              0          3         69        3139           3  0     0 0     0 0     0 0     0    13350
  930  100  57   3  TO 5. ADVANCE TO            245          3         69        3139           3  0     0 0     0 0     0 0     0    13351
  931  003   4   2  TO 5. ADVANCE TO            245          3         69        3139           3  0     0 0     0 0     0 0     0    13352
  932  503169   3  TO 5. ADVANCE TO            241          3         69        3139           3  0     0 0     0 0     0 0     0    13353
  937  420  77   3  TO 5. ADVANCE TO            241          3         69        3139           3  0     0 0     0 0     0 0     0    13354
.....
                                                                                                                                  11101000
                                                                                                                                  00011001
                                                                                                                                  11110001
        COMPILE  94.3:   ALTO    25                                                                                               01010110
**************** PAGE 25.  OPEN 25. ALARM.                                                                                                *****          13395
   62  503165   1                PAGE              0          3         69        3139           3  0     0 0     0 0     0 0     0    13421
  933  403173   1                PAGE              0          3         69        3139           3  0     0 0     0 0     0 0     0    13422
.....
  943  100  52   3             PAGE 2            934          0          3          69        3139  0     0 0     0 0     0 0     0    13424
  945  702   0   3             PAGE 2            934          0          3          69        3139  0     0 0     0 0     0 0     0    13425
  934  300   1   1             PAGE 2              0          3         69        3139           3  0     0 0     0 0     0 0     0    13426
  936  002252   1             PAGE 2              0          3         69        3139           3  0     0 0     0 0     0 0     0    13427
.....
                                                                                                                                  01100010
                                                                                                                                  01011111
                                                                                                                                  00011001
                                                                                                                                  11111100
        COMPILE  95.0:   LLLR    25
   61  513158   1        PAGE 25.  OPEN            0          3         69        3139           3  0     0 0     0 0     0 0     0    13495
  926  001249   1        PAGE 25.  OPEN            3         69       3139           3        1088  0     0 0     0 0     0 0     0    13496
  927  503169   1        PAGE 25.  OPEN          249          3         69        3139           3  0     0 0     0 0     0 0     0    13497
.....
                                                                                                                                  11100011
                                                                                                                                  00011001
                                                                                                                                  11111001
        COMPILE  95.1:   OC      25
   50  503178   1        OPEN 25. ALARM            0          3         69        3139           3  0     0 0     0 0     0 0     0    13565
  946  711   4   1        OPEN 25. ALARM            0          3         69        3139           3  0     0 0     0 0     0 0     0    13566
                                                                                                                                  11101110
                                                                                                                                  00000000
                                                                                                                                  00000100
        COMPILE  95.2:   ALARM    0
  947  500   3   1        OPEN 25. ALARM            3         69       3139           3        1088  0     0 0     0 0     0 0     0    13567
.....
                                                                                                                                  01010100
**************** END LOOP T.  END LOOP S.                                                                                                 *****          13574
   55  512247   2                END              0          3         69        3139           3  0     0 0     0 0     0 0     0    13600
  759  101  55   2                END              3         69       3139           3        1088  0     0 0     0 0     0 0     0    13601
  760  503  30   1          END LOOP               3         69       3139           3        1088  0     0 0     0 0     0 0     0    13602
  798  101  56   1          END LOOP               3         69       3139           3        1088  0     0 0     0 0     0 0     0    13603
  800  312   3   1          END LOOP               3         69       3139           3        1088  0     0 0     0 0     0 0     0    13604
  801  623   0   1          END LOOP              69       3139          3        1088          54  0     0 0     0 0     0 0     0    13605
  802  711  32   1          END LOOP            3139         69          3        1088          54  0     0 0     0 0     0 0     0    13606
                                                                                                                                  01101110
                                                                                                                                  01011111
                                                                                                                                  01000011
                                                                                                                                  00101100
        COMPILE  95.3:   BRU30    67
  803  502252   1          END LOOP              69          3       1088          54           1  0     0 0     0 0     0 0     0    13607
  764  402  23   2          END LOOP              69          3       1088          54           1  0     0 0     0 0     0 0     0    13608
.....
                                                                                                                                  01011101
                                                                                                                                  01100000
      FIXUP LOCATION  69.0                                                                                                        01000101
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                                                                   01100000
                                                                   00100000
                                                                   01010101
 765 001   1  3           END LOOP       3       1088       54         1       1024 0    0 0   0 0   0 0     0     13636
 766 611150   3           END LOOP       1          3     1088        54          1 0    0 0   0 0   0 0     0     13637
 767 500122   3           END LOOP       3       1088       54         1       1024 0    0 0   0 0   0 0     0     13638
•••••
  55 512247   3   END LOOP T.  END       0          3     1088        54          1 0    0 0   0 0   0 0     0     13672
 759 101  55  3   END LOOP T.  END       3       1088       54         1       1024 0    0 0   0 0   0 0     0     13673
 760 503  30  2   OOP T.  END LOOP       3       1088       54         1       1024 0    0 0   0 0   0 0     0     13674
 798 101  56  2   OOP T.  END LOOP       3       1088       54         1       1024 0    0 0   0 0   0 0     0     13675
 800 312   3  2   OOP T.  END LOOP       3       1088       54         1       1024 0    0 0   0 0   0 0     0     13676
 801 623   0  2   OOP T.  END LOOP    1088         54        1      1024          5 0    0 0   0 0   0 0     0     13677
 802 711  32  2   OOP T.  END LOOP      54       1088        1      1024          5 0    0 0   0 0   0 0     0     13678
                                                                   01100010
                                                                   01100000
                                                                   00110110
                                                                   00100000
        COMPILE   96.0:   BRUOO   54
 803 502252   2   OOP T.  END LOOP    1088          1     1024         5       3313 0    0 0   0 0   0 0     0     13679
 764 402  23  3   OOP T.  END LOOP    1088          1     1024         5       3313 0    0 0   0 0   0 0     0     13680
•••••
                                                                   01010011
                                                                   01100100
      FIXUP LOCATION  64.1
                                                                   01000000
                                                                   01100000
                                                                   00100100
                                                                   01010000
*************** ENTER(1)P(I), ENTER(1,1)P(I);A7,B7.                                           *****                13718
  56 512193   1              ENTER       0          1     1024         5       3313 0    0 0   0 0   0 0     0     13744
 705 102174   1              ENTER       1       1024        5  33132751467648 0    0 0   0 0   0 0     0     13745
 706 420  77  1             ENTER(       1       1024        5  33132751467648 0    0 0   0 0   0 0     0     13746
•••••
 707 012   1  1           ENTER(1)       1          1     1024         5       3313 0    0 0   0 0   0 0     0     13764
 708 101148   1           ENTER(1)      16          1     1024         5       3313 0    0 0   0 0   0 0     0     13765
 709 502200   1           ENTER(1)      16          1     1024         5       3313 0    0 0   0 0   0 0     0     13766
 712 102142   1           ENTER(1)      16          1     1024         5       3313 0    0 0   0 0   0 0     0     13767
 713 420153   1           ENTER(1)      16          1     1024         5       3313 0    0 0   0 0   0 0     0     13768
•••••
                                                                   01100110
                                                                   01100000
                                                                   11111110
                                                                   11011101
        COMPILE   96.1:   TRA1   254   I
                                                                   11100001
                                                                   00001101
                                                                   10100111
        COMPILE   96.2:    TAIR      13
 714 402149   1       ENTER(1)P(I)  852208         16        1      1024          5 0    0 0   0 0   0 1 254     13841
 661 101150   1       ENTER(1)P(I)     715     852208       16         1       1024 0    0 0   0 0   0 1 254     13842
 662 702   0  1     ENTER(1)P(I).      715     852208       16         1       1024 0    0 0   0 0   0 1 254     13843
 715 711  67  1     ENTER(1)P(I).   852208         16        1      1024          5 0    0 0   0 0   0 1 254     13844
                                                                   11100000
                                                                   00000000
                                                                   00101111
        COMPILE   96.3:   MOD3     0
                                                                   11101101
                                                                   11110000
                                                                   01000011
        COMPILE   97.0:   LKBR1  240   A
 716 711151   1     ENTER(1)P(I).       16          1     1024         5       3313 0    0 0   0 0   0 0 254     13845
                                                                   11101000
                                                                   00010000
                                                                   10010111
        COMPILE   97.1:   NERCM    16
 717 500   3  1     ENTER(1)P(I).        1       1024        5  33132751467648 0    0 0   0 0   0 0 254     13846
•••••
  56 512193   2   ER(1)P(I). ENTER       0          1     1024         5       3313 0    0 0   0 0   0 0 254     13879
 705 102174   2   ER(1)P(I). ENTER       1       1024        5  33132751467648 0    0 0   0 0   0 0 254     13880
 706 420  77  2   R(1)P(I). ENTER(       1       1024        5  33132751467648 0    0 0   0 0   0 0 254     13881
•••••
 707 012   1  2   1)P(I). ENTER(1,       1          1     1024         5       3313 0    0 0   0 0   0 0 254     13899
 708 101148   2   1)P(I). ENTER(1,      16          1     1024         5       3313 0    0 0   0 0   0 0 254     13900
 710 420  77  1   1)P(I). ENTER(1,      16          1     1024         5       3313 0    0 0   0 0   0 0 254     13901
•••••
 711 011   0  1   P(I). ENTER(1,1)       1         16        1      1024          5 0    0 0   0 0   0 0 254     13919
 712 102142   2   P(I). ENTER(1,1)      17          1     1024         5       3313 0    0 0   0 0   0 0 254     13920
 713 420153   2   P(I). ENTER(1,1)      17          1     1024         5       3313 0    0 0   0 0   0 0 254     13921
•••••
 714 402149   2   . ENTER(1,1)P(I)  852208         17        1      1024          5 0    0 0   0 0   0 1 254     13978
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661 101150  2    . ENTER(1,1)P(I)          715     852208          17           1        1024 0   0 0   0 0   0 1 254    13979
663 001   0  1     ENTER(1,1)P(I);         715     852208          17           1        1024 0   0 0   0 0   0 1 254    13980
664 601115  1     ENTER(1,1)P(I);           0        715     852208          17             1 0   0 0   0 0   0 1 254    13981
665 001   1  1     ENTER(1,1)P(I);           0        715     852208          17             1 0   0 0   0 0   0 1 254    13982
666 611125  1     ENTER(1,1)P(I);           1          0        715     852208          17 0   0 0   0 0   0 1 254    13983
667 422102  1     ENTER(1,1)P(I);           0        715     852208          17             1 0   0 0   0 0   0 1 254    13984
.....
668 720   0  1   NTER(1,1)P(I);A7           7          0        715     852208          17 0   0 0   0 0   0 1 254    14001
669 301   0  1   NTER(1,1)P(I);A7           7          0        715     852208          17 0   0 0   0 0   0 1 254    14002
670 502163  1   NTER(1,1)P(I);A7           7          0        715     852208          17 0   0 0   0 0   0 1 254    14003
675 622   0  1   NTER(1,1)P(I);A7           7          0        715     852208          17 0   0 0   0 0   0 1 254    14004
676 600125  1   NTER(1,1)P(I);A7           7          1        715     852208          17 0   0 0   0 0   0 1 254    14005
677 710   0  1   NTER(1,1)P(I);A7           1          7          1        715     852208 0   0 0   0 0   0 1 254    14006
678 002   1  1   NTER(1,1)P(I);A7           1          7          1        715     852208 0   0 0   0 0   0 1 254    14007
679 300   0  1   NTER(1,1)P(I);A7           2          7          1        715     852208 0   0 0   0 0   0 1 254    14008
681 611125  1   NTER(1,1)P(I);A7           2          7          1        715     852208 0   0 0   0 0   0 1 254    14009
682 720   0  1   NTER(1,1)P(I);A7           7          1        715     852208          17 0   0 0   0 0   0 1 254    14010
683 301   0  1   NTER(1,1)P(I);A7           7          1        715     852208          17 0   0 0   0 0   0 1 254    14011
684 502156  1   NTER(1,1)P(I);A7           7          1        715     852208          17 0   0 0   0 0   0 1 254    14012
668 720   0  2   NTER(1,1)P(I);A7           7          1        715     852208          17 0   0 0   0 0   0 1 254    14013
669 301   1  2   NTER(1,1)P(I);A7           7          1        715     852208          17 0   0 0   0 0   0 1 254    14014
670 502163  2   NTER(1,1)P(I);A7           7          1        715     852208          17 0   0 0   0 0   0 1 254    14015
675 622   0  2   NTER(1,1)P(I);A7           7          1        715     852208          17 0   0 0   0 0   0 1 254    14016
676 600125  2   NTER(1,1)P(I);A7           7          2        715     852208          17 0   0 0   0 0   0 1 254    14017
677 710   0  2   NTER(1,1)P(I);A7           2          7          2        715     852208 0   0 0   0 0   0 1 254    14018
678 002   2  2   NTER(1,1)P(I);A7           2          7          2        715     852208 0   0 0   0 0   0 1 254    14019
679 300   0  2   NTER(1,1)P(I);A7           4          7          2        715     852208 0   0 0   0 0   0 1 254    14020
681 611125  2   NTER(1,1)P(I);A7           4          7          2        715     852208 0   0 0   0 0   0 1 254    14021
682 720   0  2   NTER(1,1)P(I);A7           7          2        715     852208          17 0   0 0   0 0   0 1 254    14022
683 301   1  2   NTER(1,1)P(I);A7           7          2        715     852208          17 0   0 0   0 0   0 1 254    14023
684 502156  2   NTER(1,1)P(I);A7           7          2        715     852208          17 0   0 0   0 0   0 1 254    14024
668 720   0  3   NTER(1,1)P(I);A7           7          2        715     852208          17 0   0 0   0 0   0 1 254    14025
669 301   2  3   NTER(1,1)P(I);A7           7          2        715     852208          17 0   0 0   0 0   0 1 254    14026
670 502163  3   NTER(1,1)P(I);A7           7          2        715     852208          17 0   0 0   0 0   0 1 254    14027
675 622   0  3   NTER(1,1)P(I);A7           7          2        715     852208          17 0   0 0   0 0   0 1 254    14028
676 600125  3   NTER(1,1)P(I);A7           7          3        715     852208          17 0   0 0   0 0   0 1 254    14029
677 710   0  3   NTER(1,1)P(I);A7           4          7          3        715     852208 0   0 0   0 0   0 1 254    14030
678 002   4  3   NTER(1,1)P(I);A7           4          7          3        715     852208 0   0 0   0 0   0 1 254    14031
679 300   0  3   NTER(1,1)P(I);A7           8          7          3        715     852208 0   0 0   0 0   0 1 254    14032
681 611125  3   NTER(1,1)P(I);A7           8          7          3        715     852208 0   0 0   0 0   0 1 254    14033
682 720   0  3   NTER(1,1)P(I);A7           7          3        715     852208          17 0   0 0   0 0   0 1 254    14034
683 301   2  3   NTER(1,1)P(I);A7           7          3        715     852208          17 0   0 0   0 0   0 1 254    14035
684 502156  3   NTER(1,1)P(I);A7           7          3        715     852208          17 0   0 0   0 0   0 1 254    14036
.....
671 600115  1   NTER(1,1)P(I);A7           7          7        715     852208          17 0   0 0   0 0   0 1 254    14087
672 700125  1   NTER(1,1)P(I);A7           0          7          7        715     852208 0   0 0   0 0   0 1 254    14088
673 002128  1   NTER(1,1)P(I);A7           0          7          7        715     852208 0   0 0   0 0   0 1 254    14089
674 611115  1   NTER(1,1)P(I);A7         128          7          7        715     852208 0   0 0   0 0   0 1 254    14090
.....
680 512177  1   NTER(1,1)P(I);A7           0          7          8        715     852208 0   0 0   0 0   0 1 254    14096
689 620   0  1   NTER(1,1)P(I);A7           7          8        715     852208          17 0   0 0   0 0   0 1 254    14097
690 301   8  1   NTER(1,1)P(I);A7           8          7          8        715     852208 0   0 0   0 0   0 1 254    14098
692 600115  1   NTER(1,1)P(I);A7           8          7          8        715     852208 0   0 0   0 0   0 1 254    14099
693 301   0  1   NTER(1,1)P(I);A7         128          8          7                 8        715 0   0 0   0 0   0 1 254    14100
694 701195  1   NTER(1,1)P(I);A7         128          8          7                 8        715 0   0 0   0 0   0 1 254    14101
                                                                  11101111
                                                                  10000000
                                                                  11000011
      COMPILE  97.2:   PKA     128    BY
695 001   0  1   NTER(1,1)P(I);A7         128          8          7                 8        715 0   0 0   0 0   0 1 254    14102
696 631115  1   NTER(1,1)P(I);A7           0        128          8                 7          8 0   0 0   0 0   0 1 254    14103
697 001   1  1   NTER(1,1)P(I);A7           7          8        715     852208          17 0   0 0   0 0   0 1 254    14104
698 502169  1   NTER(1,1)P(I);A7           1          7          8        715     852208 0   0 0   0 0   0 1 254    14105
.....
685 100148  1   NTER(1,1)P(I);A7           7          8        715     852208          17 0   0 0   0 0   0 1 254    14109
686 512155  1   TER(1,1)P(I);A7,           7          8        715     852208          17 0   0 0   0 0   0 1 254    14110
667 422102  2   TER(1,1)P(I);A7,           8        715     852208          17             1 0   0 0   0 0   0 1 254    14111
.....
618 112178  2   ER(1,1)P(I);A7,B           3        668          8        715     852208 0   0 0   0 0   0 1 254    14115
619 001  11  2   ER(1,1)P(I);A7,B         668          8        715     852208          17 0   0 0   0 0   0 1 254    14116
.....
671 600115  2   R(1,1)P(I);A7,B7          15         15        715     852208          17 0   0 0   0 0   0 1 254    14215
672 700125  2   R(1,1)P(I);A7,B7           0         15         15        715     852208 0   0 0   0 0   0 1 254    14216
673 002128  2   R(1,1)P(I);A7,B7           0         15         15        715     852208 0   0 0   0 0   0 1 254    14217
674 611115  2   R(1,1)P(I);A7,B7         128         15         15        715     852208 0   0 0   0 0   0 1 254    14218
.....
680 512177  2   R(1,1)P(I);A7,B7           0         15         16        715     852208 0   0 0   0 0   0 1 254    14224
689 620   0  2   R(1,1)P(I);A7,B7          15         16        715     852208          17 0   0 0   0 0   0 1 254    14225
690 301   8  2   R(1,1)P(I);A7,B7          16         15         16        715     852208 0   0 0   0 0   0 1 254    14226
691 502187  1   R(1,1)P(I);A7,B7          16         15         16        715     852208 0   0 0   0 0   0 1 254    14227
699 600115  1   R(1,1)P(I);A7,B7          16         15         16        715     852208 0   0 0   0 0   0 1 254    14228
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  700 301   0   1    R(1,1)P(I);A7,B7                128          16          15          16          715 0   0 0   0 0   0 1 254    14229
  701 701199   1    R(1,1)P(I);A7,B7                128          16          15          16          715 0   0 0   0 0   0 1 254    14230
                                                                                                  11100111
                                                                                                  10000000
                                                                                                  11000111

        COMPILE  97.3:   PKB     128    BY
  702 522191   1    R(1,1)P(I);A7,B7                128          16          15          16          715 0   0 0   0 0   0 1 254    14231
  703 222  15   1    R(1,1)P(I);A7,B7                 15          16         715      852208          17 0   0 0   0 0   0 1 254    14232
  704 702   0   1    R(1,1)P(I);A7,B7                715      852208          17           1         1024 0   0 0   0 0   0 1 254    14233
  715 711  67   2    R(1,1)P(I);A7,B7             852208          17           1        1024            5 0   0 0   0 0   0 1 254    14234
                                                                                                  11100011
                                                                                                  00000000
                                                                                                  00101111

        COMPILE  98.0:   MOD3    0
                                                                                                  11101101
                                                                                                  11110000
                                                                                                  01000011

        COMPILE  98.1:   LKBR1  240    A
  716 711151   2    R(1,1)P(I);A7,B7                 17           1          1024           5         3313 0   0 0   0 0   0 0 254    14235
                                                                                                  11101000
                                                                                                  00010001
                                                                                                  10010111

        COMPILE  98.2:   NERCM   17
  717 500   3   2    R(1,1)P(I);A7,B7                  1        1024             5  33132751467648 0   0 0   0 0   0 0 254    14236
.....
                                                                                                  01011110
**************** L1:0 TYPE(1), TYPE(1)Z(I);A0, B0, B1.                                                                    *****          14243
   13 500  23   1                    L1              1        1024             5  33132751467648 0   0 0   0 0   0 0 254    14245
   23 102158   1                    L1              1        1024             5  33132751467648 0   0 0   0 0   0 0 254    14246
   24 600170   1                 L1:                1        1024             5  33132751467648 0   0 0   0 0   0 0 254    14247
   25 312   0   1                 L1:                0           1          1024           5         3313 0   0 0   0 0   0 0 254    14248
   26 001  32   1                 L1:                1        1024             5  33132751467648 0   0 0   0 0   0 0 254    14249
   27 601170   1                 L1:               32           1          1024           5         3313 0   0 0   0 0   0 0 254    14250
   28 032   0   1                 L1:               32           1          1024           5         3313 0   0 0   0 0   0 0 254    14251
 IDENTIFIER TABLE ENTRY FOR L1      SET TO TYPE 6, SIZE  32, LOCATION 204.
   29 012   2   1                 L1:               32           1          1024           5         3313 0   0 0   0 0   0 0 254    14252
   30 600110   1                 L1:             8192           1          1024           5         3313 0   0 0   0 0   0 0 254    14253
   31 011   0   1                 L1:             3170        8192             1        1024            5 0   0 0   0 0   0 0 254    14254
   32 600180   1                 L1:            11362           1          1024           5         3313 0   0 0   0 0   0 0 254    14255
   33 402  44   1                 L1:              204       11362             1        1024            5 0   0 0   0 0   0 0 254    14256
  556 623   0   1                 L1:               34         204         11362           1         1024 0   0 0   0 0   0 0 254    14257
  557 502  50   1                 L1:              204          34         11362           1         1024 0   0 0   0 0   0 0 254    14258
.....
                                                                                                  10100001
      COMPILE CONSTANT IN LOCATION 1.204      0   0   0   0   0   0   0   0   0   0   0   0   2  12   6   2
                                                                                                  11001100
                                                                                                  01100010
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                                                                                                  01011011
   34 510   0   1                 L1:              204           1          1024           5         3313 0   0 0   0 0   0 0 254    14335
    0 401  85   2                 L1:                1        1024             5  33132751467648 0   0 0   0 0   0 0 254    14336
.....
    1 500   6   2                 L1:                1        1024             5  33132751467648 0   0 0   0 0   0 0   0    14343
.....
  805 503  46   2          L1:0 TYPE                0          36             1        1024            5 0   0 0   0 0   0 0   0    14372
  814 711251   3          L1:0 TYPE                0          36             1        1024            5 0   0 0   0 0   0 0   0    14373
                                                                                                  01101110
                                                                                                  01100010
                                                                                                  00000000
                                                                                                  11111011
        COMPILE  98.3:   LPOSR    0
  815 702   0   3          L1:0 TYPE               36           1          1024           5         3313 0   0 0   0 0   0 0   0    14374
   36 500  14   3          L1:0 TYPE                1        1024             5  33132751467648 0   0 0   0 0   0 0   0    14375
.....
   66 512206   1          L1:0 TYPE                0           1          1024           5         3313 0   0 0   0 0   0 0   0    14400
  718 102174   1          L1:0 TYPE                1        1024             5  33132751467648 0   0 0   0 0   0 0   0    14401
  719 420  77   1       L1:0 TYPE(                  1        1024             5  33132751467648 0   0 0   0 0   0 0   0    14402
.....
  720 102142   1    L1:0 TYPE(1)                    1           1          1024           5         3313 0   0 0   0 0   0 0   0    14420
  721 401  91   1    L1:0 TYPE(1)                    1           1          1024           5         3313 0   0 0   0 0   0 0   0    14421
.....
  723 001   0   1    L1:0 TYPE(1),                   1           1          1024           5         3313 0   0 0   0 0   0 0   0    14426
  724 410155   1    L1:0 TYPE(1),                   0           1             1        1024            5 0   0 0   0 0   0 0   0    14427
.....
  725 512218   1    L1:0 TYPE(1),                   0           1             1        1024            5 0   0 0   0 0   0 0   0    14430
```

```
 730 402149  1       L1:0 TYPE(1).          1          1       1024          5        3313 0   0 0   0 0   0 0   0   14431
 661 101150  3       L1:0 TYPE(1).        731          1          1       1024          5 0   0 0   0 0   0 0   0   14432
 662 702   0 2       L1:0 TYPE(1).        731          1          1       1024          5 0   0 0   0 0   0 0   0   14433
 731 711153  1       L1:0 TYPE(1).          1          1       1024          5        3313 0   0 0   0 0   0 0   0   14434
                                                                11101110
                                                                00000001
                                                                10011001

        COMPILE  99.0:    TK        1
 732 500   3 1         L1:0 TYPE(1).          1       1024          5  33132751467648 0   0 0   0 0   0 0   0   14435
.....
  66 512206  2     :0 TYPE(1). TYPE          0          1       1024          5        3313 0   0 0   0 0   0 0   0   14468
 718 102174  2     :0 TYPE(1). TYPE          1       1024          5  33132751467648 0   0 0   0 0   0 0   0   14469
 719 420 77  2     0 TYPE(1). TYPE(          1       1024          5  33132751467648 0   0 0   0 0   0 0   0   14470
.....
 720 102142  2     TYPE(1). TYPE(1)          1          1       1024          5        3313 0   0 0   0 0   0 0   0   14488
 721 401 91  2     TYPE(1). TYPE(1)          1          1       1024          5        3313 0   0 0   0 0   0 0   0   14489
.....
 723 001   0 2     YPE(1). TYPE(1)Z          1          1       1024          5        3313 0   0 0   0 0   0 0   0   14494
 724 410155  2     YPE(1). TYPE(1)Z          0          1          1       1024          5 0   0 0   0 0   0 0   0   14495
.....
                                                                11100001
                                                                11010001
                                                                01000011

        COMPILE  99.1:    LKBR1   209    Z
                                                                11101011
                                                                00001101
                                                                01000100

        COMPILE  99.2:    LIB      13
                                                                11101101
                                                                11111110
                                                                11011101

        COMPILE  99.3:    TRA1    254    I
                                                                11100001
                                                                00001001
                                                                10100111

        COMPILE 100.0:    TAIR      9
 726 402149  1   (1). TYPE(1)Z(I)  14221567          0          1          1       1024 0   0 0   0 1 254 1 209   14626
.....
 663 001   0 2   1). TYPE(1)Z(I);      727   14221567          0          1          1 0   0 0   0 1 254 1 209   14628
 664 601115  2   1). TYPE(1)Z(I);        0        727   14221567          0          1 0   0 0   0 1 254 1 209   14629
 665 001   1 2   1). TYPE(1)Z(I);        0        727   14221567          0          1 0   0 0   0 1 254 1 209   14630
 666 611125  2   1). TYPE(1)Z(I);        1          0        727   14221567          0 0   0 0   0 1 254 1 209   14631
 667 422102  3   1). TYPE(1)Z(I);        0        727   14221567          0          1 0   0 0   0 1 254 1 209   14632
.....
 671 600115  3    . TYPE(1)Z(I);A0       0          0        727   14221567          0 0   0 0   0 1 254 1 209   14651
 672 700125  3    . TYPE(1)Z(I);A0       0          0          0        727  14221567 0   0 0   0 1 254 1 209   14652
 673 002   1 3    . TYPE(1)Z(I);A0       0          0          0        727  14221567 0   0 0   0 1 254 1 209   14653
 674 611115  3    . TYPE(1)Z(I);A0       1          0          0        727  14221567 0   0 0   0 1 254 1 209   14654
.....
 685 100148  2    .TYPE(1)Z(I);A0        0          1        727   14221567          0 0   0 0   0 1 254 1 209   14663
 686 512155  2    'TYPE(1)Z(I);A0,       0          1        727   14221567          0 0   0 0   0 1 254 1 209   14664
.....
 618 112178  3   YPE(1)Z(I);A0, B        3        668          1        727  14221567 0   0 0   0 1 254 1 209   14669
 619 001  11 3   YPE(1)Z(I);A0, B      668          1        727   14221567          0 0   0 0   0 1 254 1 209   14670
.....
 680 512177  3   PE(1)Z(I);A0, B0       0          8          8        727  14221567 0   0 0   0 1 254 1 209   14763
 689 620   0 3   PE(1)Z(I);A0, B0       8          8        727   14221567          0 0   0 0   0 1 254 1 209   14764
 690 301   8 3   PE(1)Z(I);A0, B0       8          8          8        727  14221567 0   0 0   0 1 254 1 209   14765
 692 600115  2   PE(1)Z(I);A0, B0       8          8          8        727  14221567 0   0 0   0 1 254 1 209   14766
 693 301   0 2   PE(1)Z(I);A0, B0       1          8          8          8        727 0   0 0   0 1 254 1 209   14767
 694 701195  2   PE(1)Z(I);A0, B0       1          8          8          8        727 0   0 0   0 1 254 1 209   14768
                                                                11100100
                                                                00000001
                                                                11000011

        COMPILE 100.1:    PKA       1
 695 001   0 2   PE(1)Z(I);A0, B0       1          8          8          8        727 0   0 0   0 1 254 1 209   14769
 696 631115  2   PE(1)Z(I);A0, B0       0          1          8          8          8 0   0 0   0 1 254 1 209   14770
 697 001   1 2   PE(1)Z(I);A0, B0       8          8        727   14221567          0 0   0 0   0 1 254 1 209   14771
 698 502169  2   PE(1)Z(I);A0, B0       1          8          8        727  14221567 0   0 0   0 1 254 1 209   14772
.....
 685 100148  3   PE(1)Z(I);A0, B0       8          9        727   14221567          0 0   0 0   0 1 254 1 209   14791
 686 512155  3   E(1)Z(I);A0, B0,       8          9        727   14221567          0 0   0 0   0 1 254 1 209   14792
.....
 687 002200  1   Z(I);A0, B0, B1.       9         10        727   14221567          0 0   0 0   0 1 254 1 209   14826
 688 502156  1   Z(I);A0, B0, B1.     209         10        727   14221567          0 0   0 0   0 1 254 1 209   14827
.....
 691 502187  2   Z(I);A0, B0, B1.      16        209         16        727  14221567 0   0 0   0 1 254 1 209   14899
 699 600115  2   Z(I);A0, B0, B1.      16        209         16        727  14221567 0   0 0   0 1 254 1 209   14900
 700 301   0 2   Z(I);A0, B0, B1.       3         16        209         16        727 0   0 0   0 1 254 1 209   14901
 701 701199  2   Z(I);A0, B0, B1.       3         16        209         16        727 0   0 0   0 1 254 1 209   14902
                                                                11101110
```

```
                                                               00000011
                                                               11000111
        COMPILE 100.2:    PKB       3
702 522191  2   Z(I);A0, B0, B1.          3          16          209          16          727 0     0 0    0 1 254 1 209     14903
703 222 15  2   Z(I);A0, B0, B1.        209          16          727    14221567            0 0     0 0    0 1 254 1 209     14904
704 702  0  2   Z(I);A0, B0, B1.        727    14221567            0           1            1 0     0 0    0 1 254 1 209     14905
727 721163  1   Z(I);A0, B0, B1.   14221567           0            1           1         1024 0     0 0    0 1 254 1 209     14906
                                                               11101000
                                                               00000000
                                                               00101111
        COMPILE 100.3:    MOD3      0
                                                               11101101
                                                               00000000
                                                               00101011
        COMPILE 101.0:    MOD2      0
                                                               11101001
                                                               11111111
                                                               10100011
        COMPILE 101.1:    LTKM1   255
728 711152  1   Z(I);A0, B0, B1.          1           1         1024           5         3313 0     0 0    0 0 254 0 209     14907
                                                               11101001
                                                               00000001
                                                               10011000
        COMPILE 101.2:    TKM       1
729 500  3  1   Z(I);A0, B0, B1.          1        1024            5  33132751467648 0     0 0    0 0 254 0 209     14908
.....
                                                               01010000
*************** TYPE(100);A7,B0.                                                                       *****             14915
 66 512206  3              TYPE           0           1         1024           5         3313 0     0 0    0 0 254 0 209     14941
718 102174  3              TYPE           1        1024            5  33132751467648 0     0 0    0 0 254 0 209     14942
719 420 77  3              TYPE(          1        1024            5  33132751467648 0     0 0    0 0 254 0 209     14943
.....
720 102142  3         TYPE(100)         100           1         1024           5         3313 0     0 0    0 0 254 0 209     14989
721 401 91  3         TYPE(100)         100           1         1024           5         3313 0     0 0    0 0 254 0 209     14990
.....
723 001  0  3        TYPE(100);         100           1         1024           5         3313 0     0 0    0 0 254 0 209     14995
724 410155  3        TYPE(100);           0         100            1        1024            5 0     0 0    0 0 254 0 209     14996
.....
725 512218  2        TYPE(100);           0         100            1        1024            5 0     0 0    0 0 254 0 209     14999
730 402149  2        TYPE(100);         100           1         1024           5         3313 0     0 0    0 0 254 0 209     15000
.....
663 001  0  3        TYPE(100);         731         100            1        1024            5 0     0 0    0 0 254 0 209     15002
664 601115  3        TYPE(100);           0         731          100           1         1024 0     0 0    0 0 254 0 209     15003
665 001  1  3        TYPE(100);           0         731          100           1         1024 0     0 0    0 0 254 0 209     15004
666 611125  3        TYPE(100);           1           0          731         100            1 0     0 0    0 0 254 0 209     15005
.....
692 600115  3      TYPE(100);A7           8           7            8         731          100 0     0 0    0 0 254 0 209     15121
693 301  0  3      TYPE(100);A7         128           8            7           8          731 0     0 0    0 0 254 0 209     15122
694 701195  3      TYPE(100);A7         128           8            7           8          731 0     0 0    0 0 254 0 209     15123
                                                               01101110
                                                               01100101
                                                               10000000
                                                               11000011
        COMPILE 101.3:    PKA     128    BY
695 001  0  3      TYPE(100);A7         128           8            7           8          731 0     0 0    0 0 254 0 209     15124
696 631115  3      TYPE(100);A7           0         128            8           7            8 0     0 0    0 0 254 0 209     15125
697 001  1  3      TYPE(100);A7           7           8          731         100            1 0     0 0    0 0 254 0 209     15126
698 502169  3      TYPE(100);A7           1           7            8         731          100 0     0 0    0 0 254 0 209     15127
.....
687 002200  2   TYPE(100);A7,B0.          8           9          731         100            1 0     0 0    0 0 254 0 209     15166
688 502156  2   TYPE(100);A7,B0.        208           9          731         100            1 0     0 0    0 0 254 0 209     15167
.....
691 502187  3   TYPE(100);A7,B0.         16         208           16         731          100 0     0 0    0 0 254 0 209     15251
699 600115  3   TYPE(100);A7,B0.         16         208           16         731          100 0     0 0    0 0 254 0 209     15252
700 301  0  3   TYPE(100);A7,B0.          1          16          208          16          731 0     0 0    0 0 254 0 209     15253
701 701199  3   TYPE(100);A7,B0.          1          16          208          16          731 0     0 0    0 0 254 0 209     15254
                                                               11101010
                                                               00000001
                                                               11000111
        COMPILE 102.0:    PKB       1
702 522191  3   TYPE(100);A7,B0.          1          16          208          16          731 0     0 0    0 0 254 0 209     15255
703 222 15  3   TYPE(100);A7,B0.        208          16          731         100            1 0     0 0    0 0 254 0 209     15256
704 702  0  3   TYPE(100);A7,B0.        731         100            1        1024            5 0     0 0    0 0 254 0 209     15257
731 711153  2   TYPE(100);A7,B0.        100           1         1024           5         3313 0     0 0    0 0 254 0 209     15258
                                                               11101010
                                                               01100100
                                                               10011001
        COMPILE 102.1:    TK      100
732 500  3  2   TYPE(100);A7,B0.          1        1024            5  33132751467648 0     0 0    0 0 254 0 209     15259
.....
                                                               01010010
```

```
**************** #IF P(12)=100+Q(1), ##UNLESS KEY(1), CLEAR P.                              *****         15266
   18 100141  1                 #         0           1         1024         5         3313 0    0 0    0 0 254 0 209     15271
   20 711 64  1               #IF         0           1         1024         5         3313 0    0 0    0 0 254 0 209     15272
                                                              01101010
                                                              01100110
                                                              00000000
                                                              01000000
        COMPILE 102.2:    RETPT     0
   21 401 85  1               #IF           1        1024          5      33132751467648 0    0 0    0 0 254 0 209     15273
.....
   22 500 35  1               #IF           1        1024          5      33132751467648 0    0 0    0 0     0 0    0     15280
.....
  168 500186  1           #IF P(1         241         193        215         245         451 0    0 0    0 0     0 0    0     15317
.....
                                                              11101110
                                                              11111100
                                                              11011101
        COMPILE 102.3:    TRA1    252    W
  197 500200  3      #IF P(12)=10         0           1          215         275         455 0    0 0    0 0     0 0    0     15400
  200 623  0  3      #IF P(12)=10         0           1          215         275         455 0    0 0    0 0     0 0    0     15401
  201 012  1  3      #IF P(12)=10         1           0          215         275         455 0    0 0    0 0     0 0    0     15402
  202 011  0  3      #IF P(12)=10        16           0          215         275         455 0    0 0    0 0     0 0    0     15403
  203 400 68  3      #IF P(12)=10        16         215          275         455         494 0    0 0    0 0     0 0    0     15404
.....
  204 500200  1     #IF P(12)=100         0          16          215         275         455 0    0 0    0 0     0 0    0     15413
.....
  205 402 46  3    #IF P(12)=100+       256         215          275         455         494 0    0 0    0 0     0 0  . 0     15424
.....
                                                              01010011
                                                              10100001
      COMPILE CONSTANT IN LOCATION 1.194      0   0   0   0   0   0   0   0   0   0   0   0   0   1   0   0
                                                              11000010
                                                              00000000
                                                              00000001
                                                              00000000
                                                              00000000
                                                              00000000
                                                              00000000
                                                              00000000
                                                              00000000
                                                              01011110
                                                              01100010
                                                              01100111
                                                              11000010
                                                              11100011
        COMPILE 103.0:    SUA1    194
  456 501198  1    #IF P(12)=100+       494           0            1        1024           5 0    0 0    0 0     0 0    0     15521
.....
  168 500186  2   IF P(12)=100+Q(1      241         193          215         275         455 0    0 0    0 0     0 0    0     15534
.....
                                                              11100000
                                                              11110001
                                                              11100011

        COMPILE 103.1:    SUA1    241    S
                                                              11100011
                                                              00010001
                                                              00000001

        COMPILE 103.2:    SKL      17
                                                              11100001
                                                              00000010
                                                              00000000
        COMPILE 103.3:    STOP      2
   18 100141  2   (12)=100+Q(1), #        0           2         3175           1        1024 0    0 0    0 0     0 0    0     15601
   19 002  1  1   12)=100+Q(1), ##        0           2         3175           1        1024 0    0 0    0 0     0 0    0     15602
   20 711 64  2   12)=100+Q(1), ##        1           2         3175           1        1024 0    0 0    0 0     0 0    0     15603
                                                              11100010
                                                              00000001
                                                              01000000
        COMPILE 104.0:    RETPT     1
   21 401 85  2   12)=100+Q(1), ##        2        3175            1        1024           5 0    0 0    0 0     0 0    0     15604
.....
   22 500 35  2   12)=100+Q(1), ##        2        3175            1        1024           5 0    0 0    0 0     0 0    0     15611
.....
                                                              11100101
                                                              00010010
                                                              00001110

        COMPILE 104.1:    EXK      18
                                                              11101101
                                                              00000010
                                                              00000000

        COMPILE 104.2:    STOP      2
```

```
  53 513180  1    SS KEY(1), CLEAR          0          2        2152          2       3175 0   0 0   0 0   0 0   0   15721
 948 102101  1    SS KEY(1), CLEAR          2       2152           2       3175         1 0   0 0   0 0   0 0   0   15722
 949 600180  1     KEY(1), CLEAR P          2       2152           2       3175         1 0   0 0   0 0   0 0   0   15723
 950 711 77  1     KEY(1), CLEAR P        241          2        2152          2       3175 0   0 0   0 0   0 0   0   15724
                                                                11100010
                                                                11110001
                                                                01001101

      COMPILE 104.3:   LDES1  241    S
 951 600170  1     KEY(1), CLEAR P          2       2152           2       3175         1 0   0 0   0 0   0 0   0   15725
 952 711 78  1     KEY(1), CLEAR P         12          2        2152          2       3175 0   0 0   0 0   0 0   0   15726
                                                                11100111
                                                                00001100
                                                                01001110

      COMPILE 105.0:   CLRN    12
 953 500  3  1     KEY(1), CLEAR P          2       2152           2       3175         1 0   0 0   0 0   0 0   0   15727
.....
                                                                01010110
                                                                01101000

      FIXUP LOCATION 104.2                                      01101000
                                                                01101001
                                                                00100100
                                                                01011111
                                                                01101100

      FIXUP LOCATION 103.3                                      01100111
                                                                01101001
                                                                00100100
                                                                01010100

*************** TYPE(100)CCCCCCDD.  PAGE RIGHT 100.                                                  *****                15794
 352 600170  3    YPE(100)CCCCCCDD        722        100           1       1024         5 0   0 0   0 0   0 0   0   15873
.....
 722 502214  1    PE(100)CCCCCCDD.        217          4         100          1       1024 0   0 0   0 0   0 0   0   15879
 726 402149  2    PE(100)CCCCCCDD.        217          4         100          1       1024 0   0 0   0 0   0 0   0   15880
.....
 662 702  0  3    PE(100)CCCCCCDD.        727        217           4        100          1 0   0 0   0 0   0 0   0   15882
 727 721163  2    PE(100)CCCCCCDD.        217          4         100          1       1024 0   0 0   0 0   0 0   0   15883
                                                                01100110
                                                                01101001
                                                                11011001
                                                                10100011

      COMPILE 105.1:   LIKM1  217    CCCCCC
 728 711152  2    PE(100)CCCCCCDD.        100          1          1024          5       3313 0   0 0   0 0   0 0   0   15884
                                                                11100100
                                                                01100100
                                                                10011000

      COMPILE 105.2:   TKM    100
 729 500  3  2    PE(100)CCCCCCDD.          1       1024           5  33132751467648 0   0 0   0 0   0 0   0   15885
.....
  62 503165  2    )CCCCCCDD.  PAGE          0          1        1024          5       3313 0   0 0   0 0   0 0   0   15918
 933 403173  2    )CCCCCCDD.  PAGE          0          1        1024          5       3313 0   0 0   0 0   0 0   0   15919
.....
 944 622  0  2    CDD.  PAGE RIGHT        934          0           1       1024         5 0   0 0   0 0   0 0   0   15922
.....
 934 300  1  2    CDD.  PAGE RIGHT          1          1        1024          5       3313 0   0 0   0 0   0 0   0   15924
 935 002  1  1    CDD.  PAGE RIGHT          1          1        1024          5       3313 0   0 0   0 0   0 0   0   15925
 936 002252  2    CDD.  PAGE RIGHT          2          1        1024          5       3313 0   0 0   0 0   0 0   0   15926
.....
                                                                11100011
                                                                01100100
                                                                11111110

      COMPILE 105.3:   LRLR   100
                                                                01010011
*************** END ROUTINE PP.                                                                      *****                15982
 761 001  0  2          END ROUTINE          1       1024           5  33132751467648 0   0 0   0 0   0 0   0   16010
 762 711139  2          END ROUTINE          0          1        1024          5       3313 0   0 0   0 0   0 0   0   16011
                                                                01100010
                                                                01101010
                                                                00000000
                                                                10001011

      COMPILE 106.0:   SRR      0
 763 312  1  2          END ROUTINE          1       1024           5  33132751467648 0   0 0   0 0   0 0   0   16012
.....
                                                                01011101
                                                                01100100

      FIXUP LOCATION   0,1                                      00000000
                                                                01101010
                                                                00100100
                                                                01011110

*************** BEGIN ROUTINE PPP(XX).                                                               *****                16051
```

```
735 600110  3        BEGIN ROUTINE          5        33132751467648        33133170894720 0    0 0    0 0    0 0    0    16079
736 001   1 3        BEGIN ROUTINE       1130           5        331327514676480        3313 0    0 0    0 0    0 0    0    16080
737 701   0 3        BEGIN ROUTINE          1     1130           5        33132751467648 0    0 0    0 0    0 0    0    16081
                                                                  01100110
                                                                  01101010
                                                                  00000001
                                                                  00000000

      COMPILE 106.1:    STOP     1
738 001   4 3        BEGIN ROUTINE          1     1130           5        33132751467648 0    0 0    0 0    0 0    0    16082
739 611120  3        BEGIN ROUTINE          4        1     1130           5        3313 0    0 0    0 0    0 0    0    16083
740 001  32 3        BEGIN ROUTINE          1     1130           5        33132751467648 0    0 0    0 0    0 0    0    16084
741 012   2 3        BEGIN ROUTINE         32        1     1130           5        3313 0    0 0    0 0    0 0    0    16085
742 600110  3        BEGIN ROUTINE       8192        1     1130           5        3313 0    0 0    0 0    0 0    0    16086
743 011   0 3        BEGIN ROUTINE       2154     8192        1     1130           5 0    0 0    0 0    0 0    0    16087
744 402  46 3        BEGIN ROUTINE      10346        1     1130           5        3313 0    0 0    0 0    0 0    0    16088
.....
                                                                  01011011
                                                                  10100001
      COMPILE CONSTANT IN LOCATION 1.193      0  0  0  0  0  0  0  0  0  0  0  0  0  2  8  6 10
                                                                  11000001
                                                                  01101010
                                                                  00101000
                                                                  00000000
                                                                  00000000
                                                                  00000000
                                                                  00000000
                                                                  00000000
                                                                  00000000
                                                                  00000000
                                                                  01011010
745 602130  3        BEGIN ROUTINE        193        1     1130           5        3313 0    0 0    0 0    0 0    0    16169
746 102104  3        BEGIN ROUTINE        193        1     1130           5        3313 0    0 0    0 0    0 0    0    16170
IDENTIFIER TABLE ENTRY FOR PPP     SET TO TYPE 4, SIZE   0, LOCATION 193.
747 101174  3     EGIN ROUTINE PPP        193        1     1130           5        3313 0    0 0    0 0    0 0    0    16171
749 001   5 2     GIN ROUTINE PPP(        193        1     1130           5        3313 0    0 0    0 0    0 0    0    16172
750 611120  2     GIN ROUTINE PPP(          5      193        1     1130           5 0    0 0    0 0    0 0    0    16173
....
IDENTIFIER TABLE ENTRY FOR XX      SET TO TYPE 5, SIZE   0, LOCATION 192.
757 102142  2      ROUTINE PPP(XX)       192        1     1130           5        3313 0    0 0    0 0    0 0    0    16179
758 510122  2      ROUTINE PPP(XX)       192        1     1130           5        3313 0    0 0    0 0    0 0    0    16180
.....
********** CALL PP(1,A,XX,L2,A(XX),XX(XX(I))).                                                          *****              16188
 52 512  78 2                CALL          0        1     1130           5        3313 0    0 0    0 0    0 0    0    16214
590 102104  2                CALL          1     1130           5 331327514676480    0 0    0 0    0 0    0    16215
591 600180  2             CALL PP          1     1130           5 331327514676480    0 0    0 0    0 0    0    16216
592 601135  2             CALL PP        212        1     1130           5        3313 0    0 0    0 0    0 0    0    16217
593 101174  2             CALL PP        212        1     1130           5        3313 0    0 0    0 0    0 0    0    16218
595 402  66 1             CALL PP(       212        1     1130           5        3313 0    0 0    0 0    0 0    0    16219
.....
581 402  46 1          CALL PP(1,          1      596      212           1        1130 0    0 0    0 0    0 0    0    16244
.....
                                                                  10100001
      COMPILE CONSTANT IN LOCATION 1.191      0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  1
                                                                  10111111
                                                                  00000001
                                                                  00000000
                                                                  00000000
                                                                  00000000
                                                                  00000000
                                                                  00000000
                                                                  00000000
                                                                  00000000
                                                                  01010100
596 401  42 1          CALL PP(1,        191      212        1     1130           5 0    0 0    0 0    0 0    0    16327
298 001255  2          CALL PP(1,        597      191      212           1     1130 0    0 0    0 0    0 0    0    16328
299 611180  2          CALL PP(1,        255      597      191         212        1 0    0 0    0 0    0 0    0    16329
.....
598 001   0 1          CALL PP(1,         13      191      212           1     1130 0    0 0    0 0    0 1  255    16375
599 720   0 1          CALL PP(1,          0       13      191         212        1 0    0 0    0 0    0 1  255    16376
600 611  13 1          CALL PP(1,          0       13      191         212        1 0    0 0    0 0    0 1  255    16377
601 620   0 1          CALL PP(1,         13      191      212           1     1130 0    0 0    0 0    0 0  255    16378
602 720   0 1          CALL PP(1,        191       13      191         212        1 0    0 0    0 0    0 0  255    16379
603 711  30 1          CALL PP(1,        191       13      191         212        1 0    0 0    0 0    0 0  255    16380
                                                                  01101010
                                                                  01101010
                                                                  10111111
                                                                  00011110

      COMPILE 106.2:   LIR3    191
604 600135  1          CALL PP(1,         13      191      212           1     1130 0    0 0    0 0    0 0  255    16381
605 003   1 1          CALL PP(1,        212       13      191         212        1 0    0 0    0 0    0 0  255    16382
606 601135  1          CALL PP(1,        211       13      191         212        1 0    0 0    0 0    0 0  255    16383
607 711  67 1          CALL PP(1,        211       13      191         212        1 0    0 0    0 0    0 0  255    16384
```

```
                                                          11101101
                                                          11010011
                                                          01000011
           COMPILE 106.3:    LKBR1  211    X
   608 721 69   1            CALL PP(1,        13        191        212          1      1130 0    0 0    0 0    0 0 255     16385
                                                          11101001
                                                          00001101
                                                          01000101
           COMPILE 107.0:    SIB        13
   609 100148   1            CALL PP(1,       212          1       1130          5      3313 0    0 0    0 0    0 0 255     16386
   610 502 83   1            CALL PP(1,       212          1       1130          5      3313 0    0 0    0 0    0 0 255     16387
   595 402 66   2            CALL PP(1,       212          1       1130          5      3313 0    0 0    0 0    0 0 255     16388
.....
   579 502 71   3           CALL PP(1,A       596        212          1       1130         5 0    0 0    0 0    0 0 255     16401
   583 411 99   3           CALL PP(1,A       596        212          1       1130         5 0    0 0    0 0    0 0 255     16402
.....
   349 501 97   3           CALL PP(1,A         1        356        584        596       212 0    0 0    0 0    0 0 255     16406
.....
   356 722  0   2          CALL PP(1,A,       221          1        584        596       212 0    0 0    0 0    0 0 255     16412
   585 623  0   2          CALL PP(1,A,       221          1        596        212         1 0    0 0    0 0    0 0 255     16413
   586 512 77   2          CALL PP(1,A,         1        221        596        212         1 0    0 0    0 0    0 0 255     16414
.....
   596 401 42   2          CALL PP(1,A,       221        212          1       1130         5 0    0 0    0 0    0 0 255     16416
   298 001255   3          CALL PP(1,A,       597        221        212          1      1130 0    0 0    0 0    0 0 255     16417
   299 611180   3          CALL PP(1,A,       255        597        221        212         1 0    0 0    0 0    0 0 255     16418
.....
   597 502 86   1          CALL PP(1,A,        13        221        212          1      1130 0    0 0    0 0    0 1 255     16454
   598 001  0   2          CALL PP(1,A,        13        221        212          1      1130 0    0 0    0 0    0 1 255     16455
   599 720  0   2          CALL PP(1,A,         0         13        221        212         1 0    0 0    0 0    0 1 255     16456
   600 611 13   2          CALL PP(1,A,         0         13        221        212         1 0    0 0    0 0    0 1 255     16457
   601 620  0   2          CALL PP(1,A,        13        221        212          1      1130 0    0 0    0 0    0 0 255     16458
   602 720  0   2          CALL PP(1,A,       221         13        221        212         1 0    0 0    0 0    0 0 255     16459
   603 711 30   2          CALL PP(1,A,       221         13        221        212         1 0    0 0    0 0    0 0 255     16460
                                                          11101100
                                                          11011101
                                                          00011110
           COMPILE 107.1:    LIR3   221    C
   604 600135   2          CALL PP(1,A,        13        221        212          1      1130 0    0 0    0 0    0 0 255     16461
   605 003  1   2          CALL PP(1,A,       211         13        221        212         1 0    0 0    0 0    0 0 255     16462
   606 601135   2          CALL PP(1,A,       210         13        221        212         1 0    0 0    0 0    0 0 255     16463
   607 711 67   2          CALL PP(1,A,       210         13        221        212         1 0    0 0    0 0    0 0 255     16464
                                                          11101111
                                                          11010010
                                                          01000011
           COMPILE 107.2:    LKBR1  210    Y
   608 721 69   2          CALL PP(1,A,        13        221        212          1      1130 0    0 0    0 0    0 0 255     16465
                                                          11101000
                                                          00001101
                                                          01000101
           COMPILE 107.3:    SIB        13
   609 100148   2          CALL PP(1,A,       212          1       1130          5      3313 0    0 0    0 0    0 0 255     16466
   610 502 83   2          CALL PP(1,A,       212          1       1130          5      3313 0    0 0    0 0    0 0 255     16467
   595 402 66   3          CALL PP(1,A,       212          1       1130          5      3313 0    0 0    0 0    0 0 255     16468
.....
                                                          11101100
                                                          11000000
                                                          01000011
           COMPILE 108.0:    LKBR1  192    XX
                                                          11101011
                                                          00001001
                                                          01000100
           COMPILE 108.1:    LIB         9
   596 401 42   3       CALL PP(1,A,XX,   9437184        212          1       1130         5 0    0 0    0 1 192 0 255     16541
.....
   597 502 86   2       CALL PP(1,A,XX,        13    9437184        212          1      1130 0    0 0    0 1 192 1 255     16579
   598 001  0   3       CALL PP(1,A,XX,        13    9437184        212          1      1130 0    0 0    0 1 192 1 255     16580
   599 720  0   3       CALL PP(1,A,XX,         0         13    9437184        212         1 0    0 0    0 1 192 1 255     16581
   600 611 13   3       CALL PP(1,A,XX,         0         13    9437184        212         1 0    0 0    0 1 192 1 255     16582
   601 620  0   3       CALL PP(1,A,XX,        13    9437184        212          1      1130 0    0 0    0 1 192 0 255     16583
   602 720  0   3       CALL PP(1,A,XX,   9437184         13    9437184        212         1 0    0 0    0 1 192 0 255     16584
   603 711 30   3       CALL PP(1,A,XX,   9437184         13    9437184        212         1 0    0 0    0 1 192 0 255     16585
                                                          11101001
                                                          00000000
                                                          00101011
           COMPILE 108.2:    MOD2        0
                                                          11101001
                                                          00000000
                                                          00011110
           COMPILE 108.3:    LIR3        0
   604 600135   3       CALL PP(1,A,XX,        13    9437184        212          1      1130 0    0 0    0 0 192 0 255     16586
   605 003  1   3       CALL PP(1,A,XX,       210         13    9437184        212         1 0    0 0    0 0 192 0 255     16587
```

```
  606 601135  3     CALL PP(1,A,XX,          209          13    9437184        212          1 0   0 0   0 0 192 0 255    16588
  607 711 67  3     CALL PP(1,A,XX,          209          13    9437184        212          1 0   0 0   0 0 192 0 255    16589
                                                                 11101111
                                                                 11010001
                                                                 01000011

        COMPILE 109.0:   LKBR1  209   Z
  608 721 69  3     CALL PP(1,A,XX,           13     9437184        212          1       1130 0   0 0   0 0 192 0 255    16590
                                                                 11101011
                                                                 00001101
                                                                 01000101

        COMPILE 109.1:   SIB     13
  609 100148  3     CALL PP(1,A,XX,          212           1        1130          5       3313 0   0 0   0 0 192 0 255    16591
  610 502 83  3     CALL PP(1,A,XX,          212           1        1130          5       3313 0   0 0   0 0 192 0 255    16592
.....
  360 703  0  2   ALL PP(1,A,XX,L2          584         596         212          1       1130 0   0 0   0 0 192 0 255    16615
  584 502 75  2   ALL PP(1,A,XX,L2          596         212           1       1130          5 0   0 0   0 0 192 0 255    16616
  587 102106  2   ALL PP(1,A,XX,L2          596         212           1       1130          5 0   0 0   0 0 192 0 255    16617
  588 600180  2   ALL PP(1,A,XX,L2          596         212           1       1130          5 0   0 0   0 0 192 0 255    16618
.....
  597 502 86  3   ALL PP(1,A,XX,L2           13         203         212          1       1130 0   0 0   0 0 192 1 255    16658
.....
                                                                 11101100
                                                                 11001011
                                                                 00011110

        COMPILE 109.2:   LIR3   203   L2
                                                                 11101000
                                                                 11010000
                                                                 01000011

        COMPILE 109.3:   LKBR1  208   L
                                                                 11101010
                                                                 00001101
                                                                 01000101

        COMPILE 110.0:   SIB     13
                                                                 11101100
                                                                 00000000
                                                                 00101011

        COMPILE 110.1:   MOD2     0
                                                                 11101001
                                                                 00000000
                                                                 11011101

        COMPILE 110.2:   TRA1     0
                                                                 11100000
                                                                 00000101
                                                                 10100111

        COMPILE 110.3:   TAIR     5
  356 722  0  3    (1,A,XX,L2,A(XX)      327900           1         584          596        212 0   0 1**** 0 192 0 255    16820
  585 623  0  3    (1,A,XX,L2,A(XX)      327900           1         596          212          1 0   0 1**** 0 192 0 255    16821
  586 512 77  3    (1,A,XX,L2,A(XX)           1      327900         596          212          1 0   0 1**** 0 192 0 255    16822
.....
                                                                 11101000
                                                                 00000000
                                                                 00100111

        COMPILE 111.0:   MOD1     0
                                                                 11100101
                                                                 11011100
                                                                 00011110

        COMPILE 111.1:   LIR3   220   CCCCCC
                                                                 11101110
                                                                 11001111
                                                                 01000011

        COMPILE 111.2:   LKBR1  207   M
                                                                 11100100
                                                                 00001101
                                                                 01000101

        COMPILE 111.3:   SIB     13
                                                                 11101100
                                                                 11111110
                                                                 11011101

        COMPILE 112.0:   TRA1   254   I
                                                                 11100001
                                                                 00000001
                                                                 10100111

        COMPILE 112.1:   TAIR     1
                                                                 11101100
                                                                 00000000
                                                                 00101011

        COMPILE 112.2:   MOD2     0
                                                                 11101001
                                                                 00000000
                                                                 00100011

        COMPILE 112.3:   MOD0     0
```

```
                                                       11100001
                                                       11111111
                                                       11011101
      COMPILE 113.0:   TRA1   255
                                                       11100000
                                                       00000101
                                                       10100111
      COMPILE 113.1:   TAIR     5
                                                       11101000
                                                       00000000
                                                       00101011
      COMPILE 113.2:   MOD2     0
                                                       11101001
                                                       00000000
                                                       00100111
      COMPILE 113.3:   MOD1     0
                                                       11100101
                                                       11111111
                                                       00011110
      COMPILE 114.0:   LIR3   255
                                                       11101111
                                                       11001110
                                                       01000011
      COMPILE 114.1:   LKBR1  206   N
                                                       11100101
                                                       00001101
                                                       01000101
      COMPILE 114.2:   SIB     13
 611 102142  1    A(XX),XX(XX(I)))       212        1     1130       5      3313 0 254 0**** 0 192 0 255    17209
 612 711129  2    A(XX),XX(XX(I)))       212        1     1130       5      3313 0 254 0**** 0 192 0 255    17210
                                                       11101100
                                                       11010100
                                                       10000001
      COMPILE 114.3:   SRJ01  212   PP
 613 500   3  2   A(XX),XX(XX(I)))         1     1130        5    33132751467648 0 254 0**** 0 192 0 255    17211
.....
                                                       01010000
**************** (XX)                                                                 *****             17218
 808 420244  2                   (        36        1     1130       5      3313 0 254 0**** 0 192 0 255    17235
.....
                                                       01100010
                                                       01110011
                                                       00000000
                                                       00101011
      COMPILE 115.0:   MOD2     0
                                                       11101111
                                                       00000000
                                                       11011101
      COMPILE 115.1:   TRA1     0
 809 102142  2                  (XX)      36        1     1130       5      3313 0 254 0**** 0 192 0 255    17294
 810 401 42  2                  (XX)      36        1     1130       5      3313 0 254 0**** 0 192 0 255    17295
.....
 811 503 44  1                  (XX)      13       36        1    1130         5 0 254 0**** 0 192 1 255    17337
 812 701167  2                  (XX)      13       36        1    1130         5 0 254 0**** 0 192 1 255    17338
                                                       11100000
                                                       00001101
                                                       10100111
      COMPILE 115.2:   TAIR    13
 813 012   4  2                 (XX)      13       36        1    1130         5 0 254 0**** 0 192 1 255    17339
.....
                                                       11100000
                                                       00000000
                                                       00101111
      COMPILE 115.3:   MOD3     0
                                                       11101101
                                                       00000000
                                                       11111011
      COMPILE 116.0:   LPOSR    0
                                                       01010100
**************** END ROUTINE PPP.                                                     *****             17345
 761 001   0  3          END ROUTINE       1     1130        5    33132751467648 0 254 0**** 0 192 0 255    17369
 762 711139  3           END ROUTINE       0        1     1130       5      3313 0 254 0**** 0 192 0 255    17370
                                                       01100110
                                                       01110100
                                                       00000000
                                                       10001011
      COMPILE 116.1:   SRR      0
 763 312   1  3          END ROUTINE       1     1130        5    33132751467648 0 254 0**** 0 192 0 255    17371
.....
                                                       01010110
                                                       01100100
```

```
     FIXUP LOCATION 106.1
                                                           01101010
                                                           01110100
                                                           00101000
                                                           01010001
**************** L2:(I+11)CALL PPP("                       ").                                       *****            17410
   13 500 23   2              L2       5     33132751467648       33133170894720 0    0 0   0 0   0 0    0      17412
   23 102158   2              L2       5     33132751467648       33133170894720 0    0 0   0 0   0 0    0      17413
   24 600170   2             L2:       5     33132751467648       33133170894720 0    0 0   0 0   0 0    0      17414
   25 312  0   2             L2:       0          5     33132751467648      3313 0    0 0   0 0   0 0    0      17415
   26 001 32   2             L2:       5     33132751467648       33133170894720 0    0 0   0 0   0 0    0      17416
   27 601170   2             L2:      32          5     33132751467648      3313 0    0 0   0 0   0 0    0      17417
   28 032  0   2             L2:      32          5     33132751467648      3313 0    0 0   0 0   0 0    0      17418
 IDENTIFIER TABLE ENTRY FOR L2     SET TO TYPE 6, SIZE  32, LOCATION 203.
   29 012  2   2             L2:      32          5     33132751467648      3313 0    0 0   0 0   0 0    0      17419
   30 600110   2             L2:    8192          5     33132751467648      3313 0    0 0   0 0   0 0    0      17420
   31 011  0   2             L2:    2164       8192          5     33132751467648 0    0 0   0 0   0 0    0      17421
   32 600180   2             L2:   10356          5     33132751467648      3313 0    0 0   0 0   0 0    0      17422
   33 402 44   2             L2:     203      10356          5     33132751467648 0    0 0   0 0   0 0    0      17423
  556 623  0   2             L2:      34        203     10356          5    3313 0    0 0   0 0   0 0    0      17424
  557 502 50   2             L2:     203         34     10356          5    3313 0    0 0   0 0   0 0    0      17425
.....
                                                           10100001
     COMPILE CONSTANT IN LOCATION 1.203      0  0  0  0   0   0   0   0  0  0  0  0  2  8  7  4
                                                           11001011
                                                           01110100
                                                           00101000
                                                           00000000
                                                           00000000
                                                           00000000
                                                           00000000
                                                           00000000
                                                           00000000
                                                           00000000
                                                           01011111
   34 510  0   2             L2:     203          5     33132751467648      3313 0    0 0   0 0   0 0    0      17502
    0 401 85   3             L2:       5     33132751467648       33133170894720 0    0 0   0 0   0 0    0      17503
.....
    1 500  6   3             L2:       5     33132751467648       33133170894720 0    0 0   0 0   0 0    0      17510
.....
  808 420244   3             L2:(     36          5     33132751467648      3313 0    0 0   0 0   0 0    0      17532
.....
                                                           01101010
                                                           01110100
                                                           11111110
                                                           11011101
      COMPILE 116.2:   TRA1   254    I
                                                           01011000
                                                           10100001
     COMPILE CONSTANT IN LOCATION 1.190      0  0  0  0   0   0   0   0  0  0  0  0  0  1  1
                                                           10111110
                                                           00010001
                                                           00000000
                                                           00000000
                                                           00000000
                                                           00000000
                                                           00000000
                                                           00000000
                                                           00000000
                                                           01010100
                                                           01101110
                                                           01110100
                                                           10111110
                                                           11100001
      COMPILE 116.3:   ADA1    190
  809 102142   3         L2:(I+11)      36          5     33132751467648      3313 0    0 0   0 0   0 0    0      17697
  810 401 42   3         L2:(I+11)      36          5     33132751467648      3313 0    0 0   0 0   0 0    0      17698
.....
  812 701167   3         L2:(I+11)      13         36          5     33132751467648 0    0 0   0 0   0 1  255    17746
                                                           11100111
                                                           00001101
                                                           10100111
      COMPILE 117.0:   TAIR     13
  813 012  4   3         L2:(I+11)      13         36          5     33132751467648 0    0 0   0 0   0 1  255    17747
.....
                                                           11100000
                                                           00000000
                                                           00101111
      COMPILE 117.1:   MOD3     0
                                                           11101101
                                                           00000000
                                                           11111011
```

```
        COMPILE 117.2:   LPOSR    0
  52 512 78   3        L2:(I+11)CALL          0          5       331327514676480       3313 0   0 0   0 0   0 0 255   17775
 590 102104   3        L2:(I+11)CALL          5  331327514676480       331331708947200 0   0 0   0 0   0 0 255   17776
 591 600180   3   2:(I+11)CALL PPP           5  331327514676480       331331708947200 0   0 0   0 0   0 0 255   17777
 592 601135   3   2:(I+11)CALL PPP         193          5       331327514676480       3313 0   0 0   0 0   0 0 255   17778
 593 101174   3   2:(I+11)CALL PPP         193          5       331327514676480       3313 0   0 0   0 0   0 0 255   17779
.....
 376 501107   2   LL PPP("          1077952576          0        584        596        193 0   0 0   0 0   0 0 255   17893
.....
 376 501107   3                    10779525761077952576          0        584        596 0   0 0   0 0   0 0 255   17982
.....
 379 501132   2                    "  0107795257610779525761077952576          0 0   0 0   0 0   0 0 255   18086
.....
                                                                                  01010100
                                                                                  10100001
      COMPILE CONSTANT IN LOCATION 1.189      0  0  0  0   0  0  0  0  0  0  0  0  0  0  0  0  0
                                                                                  10111101
                                                                                  00000000
                                                                                  00000000
                                                                                  00000000
                                                                                  00000000
                                                                                  00000000
                                                                                  00000000
                                                                                  00000000
                                                                                  01010111
 392 501132   2                    "1077952576107795257610779525760          584 0   0 0   0 0   0 0 255   18171
.....
                                                                                  10100001
      COMPILE CONSTANT IN LOCATION 1.188      4  0  4  0   4  0  4  0  4  0  4  0  4  0  4  0  4
                                                                                  10111100
                                                                                  01000000
                                                                                  01000000
                                                                                  01000000
                                                                                  01000000
                                                                                  01000000
                                                                                  01000000
                                                                                  01000000
                                                                                  01010110
 392 501132   3                    "10779525761077952576          0        584        596 0   0 0   0 0   0 0 255   18256
.....
                                                                                  10100001
      COMPILE CONSTANT IN LOCATION 1.187      4  0  4  0   4  0  4  0  4  0  4  0  4  0  4  0  4
                                                                                  10111011
                                                                                  01000000
                                                                                  01000000
                                                                                  01000000
                                                                                  01000000
                                                                                  01000000
                                                                                  01000000
                                                                                  01000000
                                                                                  01010001
                                                                                  10100001
      COMPILE CONSTANT IN LOCATION 1.186      4  0  4  0   4  0  4  0  4  0  4  0  4  0  4  0  4
                                                                                  10111010
                                                                                  01000000
                                                                                  01000000
                                                                                  01000000
                                                                                  01000000
                                                                                  01000000
                                                                                  01000000
                                                                                  01000000
                                                                                  01010000
                                                                                  01101110
                                                                                  01110101
                                                                                  10111010
                                                                                  00011110
       COMPILE 117.3:   LIR3   186
                                                                                  11100010
                                                                                  11000000
                                                                                  01000011
       COMPILE 118.0:   LKBR1  192   XX
                                                                                  11101011
                                                                                  00001101
                                                                                  01000101
       COMPILE 118.1:   SIB     13
 611 102142   2                    ")        193          5       331327514676480       3313 0   0 0   0 0   0 0 255   18484
 612 711129   3                    ")        193          5       331327514676480       3313 0   0 0   0 0   0 0 255   18485
```

```
                                                          11101100
                                                          11000001
                                                          10000001
           COMPILE 118.2:   SRJ01  193    PPP
  613 500  3  3                    ")          5        33132751467648      33133170894720 0    0 0    0 0    0 0 255     18486
.....
                                                          01010100
**************** >    WERE THERE ZERO DEFECTS?                                                       *****                18493
   11 502253  2                     >          5        33132751467648      33133170894720 0    0 0    0 0    0 0 255     18494
.....
**************** END.                                                                                *****                18505
  760 503 30   3                 END.          5        33132751467648      33133170894720 0    0 0    0 0    0 0 255     18533
  798 101 56   3                 END.          5        33132751467648      33133170894720 0    0 0    0 0    0 0 255     18534
  799 503212   1                 END.          5        33132751467648      33133170894720 0    0 0    0 0    0 0 255     18535
  980 102149   1                 END.          5        33132751467648      33133170894720 0    0 0    0 0    0 0 255     18536
  981 312  5   1                 END.          5        33132751467648      33133170894720 0    0 0    0 0    0 0 255     18537
  982 001  0   1                 END.  33132751467648      33133170894720296956787 2 0    0 0    0 0    0 0 255     18538
  983 402 23   1                 END.          0        33132751467648      33133170894720 0    0 0    0 0    0 0 255     18539
.....
                                                          01100000
       FIXUP LOCATION   0.0
                                                          00000000
                                                          01110110
                                                          00101100
                                                          01011111
  984 600190   1                 END.  33132751467648      33133170894720296956787 2 0    0 0    0 0    0 0     0     18567
  985 300  0   1                 END.          3        33132751467648      33133170894720 0    0 0    0 0    0 0     0     18568
  987 003  1   1                 END.          3        33132751467648      33133170894720 0    0 0    0 0    0 0     0     18569
  988 710  0   1                 END.          2        33132751467648      33133170894720 0    0 0    0 0    0 0     0     18570
  989 031  2   1                 END.          2        33132751467648      33133170894720 0    0 0    0 0    0 0     0     18571
  990 402 46   1                 END. 286340710        2        33132751467648         3313 0    0 0    0 0    0 0     0     18572
.....
                                                          10100001
       COMPILE CONSTANT IN LOCATION 1.185        8  1  1  1  1  1  1  1  1  1  1  1  3  6  6  6
                                                          10111001
                                                          01100110
                                                          00110110
                                                          00010001
                                                          00010001
                                                          00010001
                                                          00010001
                                                          00010001
                                                          10000001
                                                          01011111
  991 513217   1                 END.        185       2        33132751467648         3313 0    0 0    0 0    0 0     0     18653
  985 300  0   2                 END.          2        33132751467648      33133170894720 0    0 0    0 0    0 0     0     18654
  987 003  1   2                 END.          2        33132751467648      33133170894720 0    0 0    0 0    0 0     0     18655
  988 710  0   2                 END.          1        33132751467648      33133170894720 0    0 0    0 0    0 0     0     18656
  989 031  1   2                 END.          1        33132751467648      33133170894720 0    0 0    0 0    0 0     0     18657
  990 402 46   2                 END. 286331165        1        33132751467648         3313 0    0 0    0 0    0 0     0     18658
.....
                                                          10100001
       COMPILE CONSTANT IN LOCATION 1.184        0  1  1  1  1  1  1  1  1  1  1  1  1  1 13
                                                          10111000
                                                          00011101
                                                          00010001
                                                          00010001
                                                          00010001
                                                          00010001
                                                          00010001
                                                          00010001
                                                          00000001
                                                          01011111
  991 513217   2                 END.        184       1        33132751467648         3313 0    0 0    0 0    0 0     0     18739
  985 300  0   3                 END.          1        33132751467648      33133170894720 0    0 0    0 0    0 0     0     18740
  987 003  1   3                 END.          1        33132751467648      33133170894720 0    0 0    0 0    0 0     0     18741
  988 710  0   3                 END.          0        33132751467648      33133170894720 0    0 0    0 0    0 0     0     18742
  989 031  0   3                 END.          0        33132751467648      33133170894720 0    0 0    0 0    0 0     0     18743
  990 402 46   3                 END.2693055069        0        33132751467648         3313 0    0 0    0 0    0 0     0     18744
.....
                                                          10100001
       COMPILE CONSTANT IN LOCATION 1.183        9  3  7  9 15 11  6 14 10  0  8  4 12  2  5 13
                                                          10110111
                                                          01011101
                                                          11000010
                                                          10000100
                                                          10100000
                                                          01101110
                                                          11111011
                                                          01111001
                                                          10010011
```

```
                                                              01010101
  991 513217  3             END.       183         0            33132751467648       3313 0    0 0    0 0    0 0    0    18825

••••
  986 503224  1             END.         0    33132751467648         33133170894720 0    0 0    0 0    0 0    0    18827
  992 600130  1             END.         0    33132751467648         33133170894720 0    0 0    0 0    0 0    0    18828
  993 700110  1             END.       182         0            33132751467648       3313 0    0 0    0 0    0 0    0    18829
  994 001120  1             END.       182         0            33132751467648       3313 0    0 0    0 0    0 0    0    18830
  995 711 82  1             END.       120       182                 0         33132751467648 0    0 0    0 0    0 0    0    18831
                                                              01101110
                                                              01110110
                                                              01111000
                                                              01010010
         COMPILE 118.3:    LBRO   120
  996 701 81  1             END.       182         0            33132751467648       3313 0    0 0    0 0    0 0    0    18832
                                                              11100111
                                                              10110110
                                                              01010001
         COMPILE 119.0:    LUR1   182
  997 002  1  1             END.       182         0            33132751467648       3313 0    0 0    0 0    0 0    0    18833
  998 711193  1             END.       183         0            33132751467648       3313 0    0 0    0 0    0 0    0    18834
                                                              11101001
                                                              10110111
                                                              11000001
         COMPILE 119.1:    LPNR1  183
  999 001  0  1             END.         0    33132751467648         33133170894720 0    0 0    0 0    0 0    0    18835
 1000 711 36  1             END.         0         0            33132751467648       3313 0    0 0    0 0    0 0    0    18836
                                                              11100001
                                                              00000000
                                                              00100100
         COMPILE 119.2:    BRU10    0
 1001 013231  1             END.         0    33132751467648         33133170894720 0    0 0    0 0    0 0    0    18837
                                                              01010110
                                                              11100111
 1002 000  0  1             END.         0    33132751467648         33133170894720 0    0 0    0 0    0 0    0    18838
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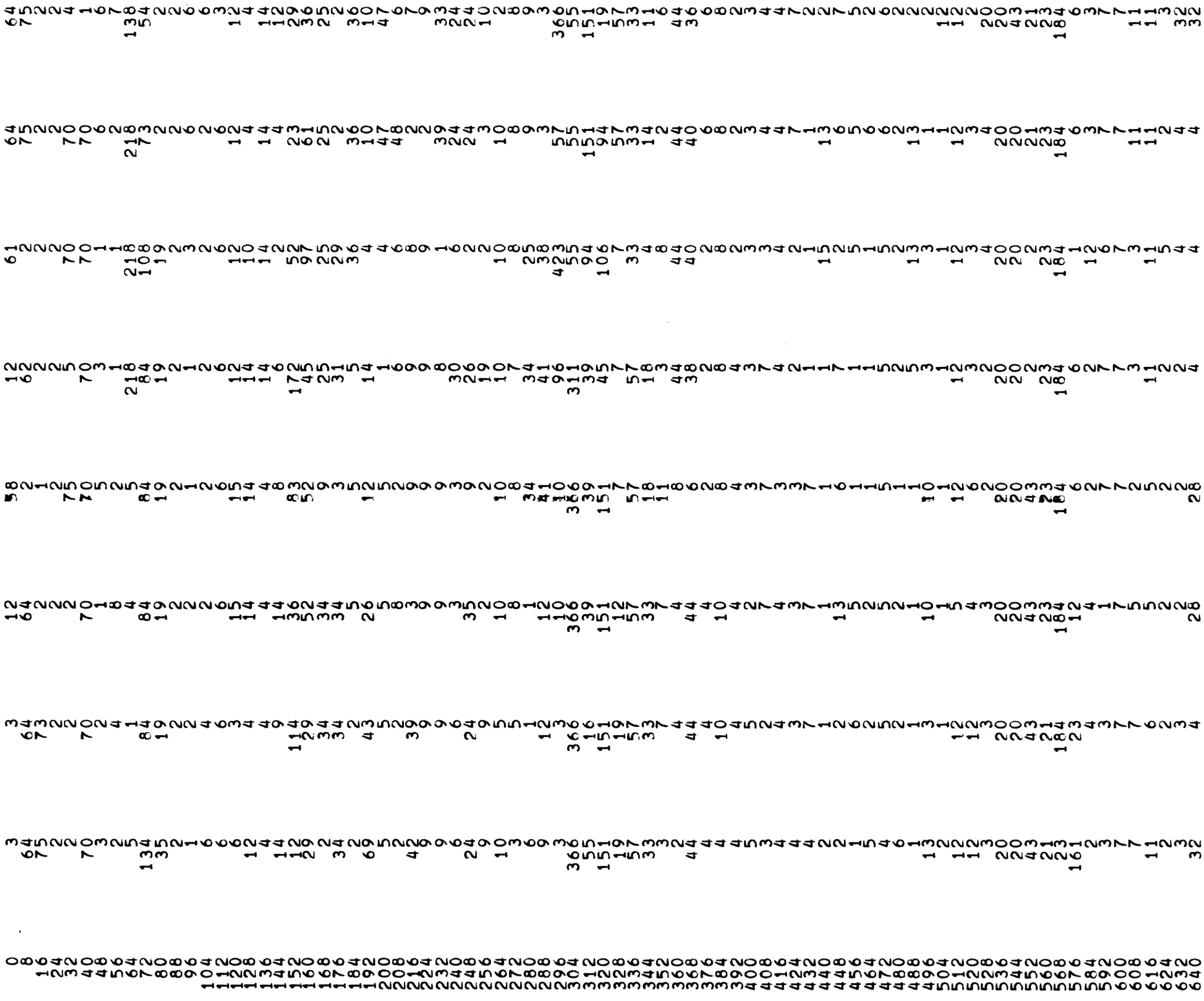

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656	1	1	2	2	2	6	3	3
664	3	3	3	7	48	48	41	7
672	7	7	7	48	48	48	48	48
680	6	45	45	45	39	6	4	2
688	2	6	6	3	3	3	3	3
696	3	3	2	3	3	3	3	3
704	3	2	2	2	2	1	1	1
712	2	2	2	2	3	2	4	4
720	4	4	1	3	3	2	2	2
728	2	2	2	2	2	5	2	3
736	3	3	3	3	3	3	3	3
744	3	3	3	1	5	2	2	7
752	7	7	7	5	5	7	7	6
760	3	3	3	2	2	2	2	2
768	2	2	2	2	2	1	1	1
776	2	2	2	2	2	2	2	2
784	1	1	2	2	2	2	3	1
792	2	2	2	2	75	2	73	70
800	2	2	2	1	3	3	5	5
808	3	3	2	2	1	1	1	1
816	7	2	2	5	5	1	4	5
824	1	5	5	5	29	29	29	29
832	5	5	2	2	3	14	3	11
840	9	20	3	17	1	9	2	7
848	2	9	1	8	1	52	52	5
856	2	5	5	5	47	5	5	5
864	47	47	5	52	3	5	5	2
872	5	5	2	12	2	10	2	8
880	3	3	1	2	2	3	3	3
888	3	1	7	8	16	17	19	21
896	2	5	24	3	3	3	3	3
904	22	24	5	5	1	5	1	5
912	3	5	3	2	3	2	2	1
920	5	3	12	12	12	5	1	4
928	3	6	1	1	1	1	1	1
936	2	4	61	61	61	61	38	23
944	2	1	18	12	12	61	5	56
952	1	18	7	49	6	6	6	6
960	5	56	6	6	1	1	1	1
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984	1	4	1	1	0	0	0	0
992	1	1	1	0	0	0	0	0
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1008	0	0	0	286	19	310	218	354
0	1	968	997	0	3	3	12	5
8	9	48	0	0	0	0	0	0
16	15	43	546	0	0	0	0	0
24	0	0	0	0	8	14	9	0
32	923	921	310	0	0	0	0	0
40	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0
56	0	0	0	83	12	1	0	0
64	473	0	0	0	0	0	0	0
72	0	0	5	0	0	0	0	0
80	0	0	0	0	0	0	0	0
88	0	0	0	22	291	136	8	6
96	689	822	7	0	0	0	0	0
104	0	0	0	0	0	0	0	0
112	0	0	0	0	0	0	0	0
120	0	0	0	80	334	6	0	67
128	180	249	61	6	0	0	0	0
136	94	23	11	0	0	0	0	0
144	0	0	0	0	0	0	0	0
152	0	0	0	252	243	328	69	24
160	472	381	365	0	0	0	0	0
168	5	0	3	0	0	0	0	0
176	0	0	0	0	0	0	0	0
184	0	0	0	0	151	841	6	0
192	1644	285	133	138	24	3	4	23
200	57	0	85	0	9	0	0	2
208	0	0	0	0	4	0	0	0
216	0	0	0	357	1136	191	343	57
224	663	120	233	0	0	7	0	0
232	311	39	121	0	12	0	0	0
240	0	9	0	0	0	0	0	0
248	0	0	0					
0	46	104	18838					