COMPUTER USAGE EDUCATION, INC.
51 Madison Avenue, New York, New York 10010 | 212/889-7850

Dear Friend:

Enclosed is the booklet "Your Opportunity in the Computer Age", in answer to your inquiry. Study it carefully.

> It tells you what computer programming is -- what it means to be a computer programmer -- what kind of a career it offers you -- how much you can earn -- how long it will take for you to complete your course -- and how Computer Usage Study Course can train you at home for this high salaried, professional career.

All you need to qualify is a high school education. No special math or technical training is required.

When you have finished studying this booklet, I'm sure you'll be enthusiastic and anxious to begin your studies immediately.

In order for you to do so, complete the enclosed enrollment form and return it today. As soon as I receive your application, I will send your first study materials and notify the instructors, who will guide you until your studies are completed.

There is no better time than today to begin.

Cordially yours,

Nate A. Newkirk

Nate A. Newkirk
Vice President and
Managing Director

NAN/cds
Enclosures

P. S. When you have completed our course, you may want to take advantage of our Job Referral Service --- without extra cost.

Computer Usage Study Course

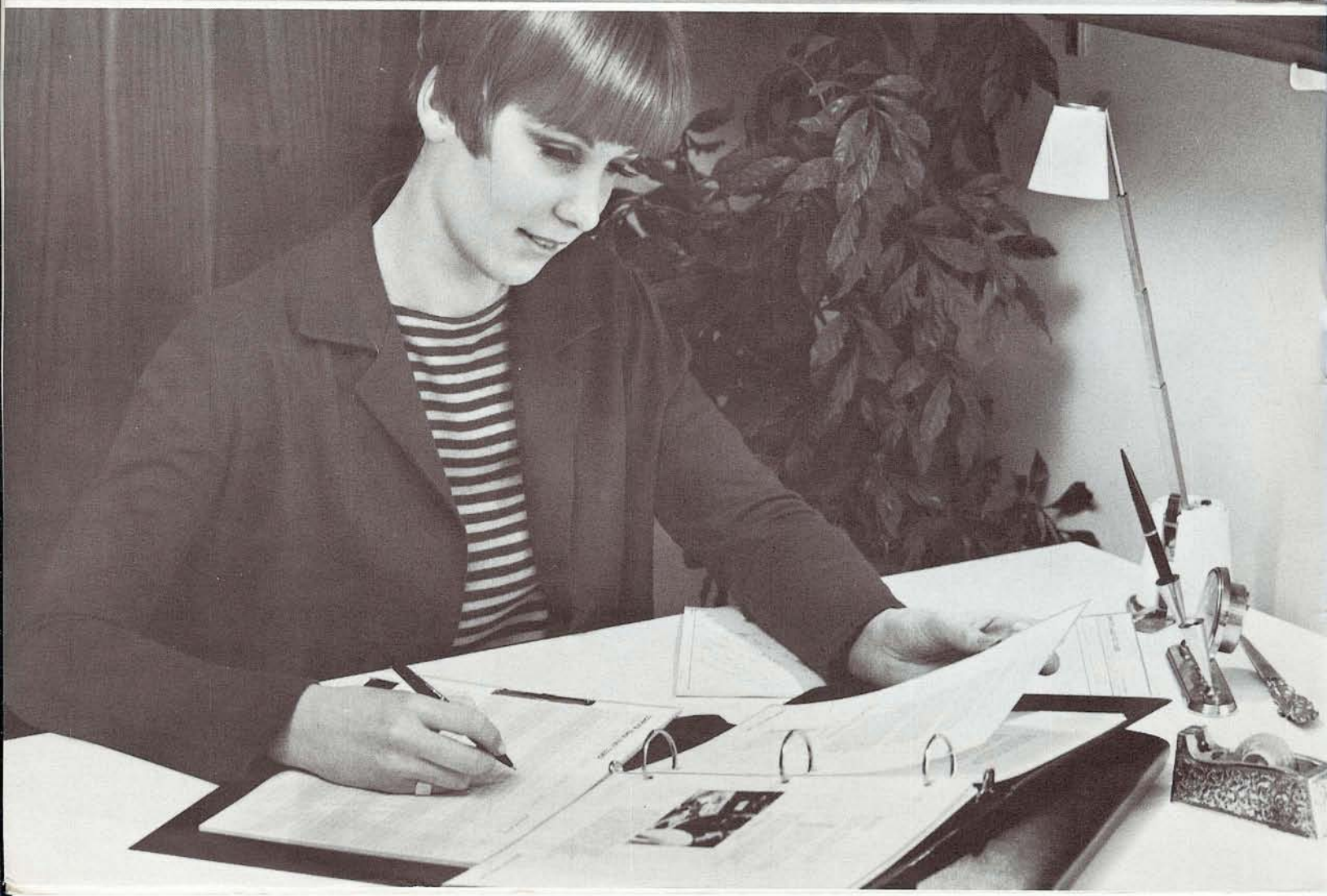
YOUR OPPORTUNITY IN THE COMPUTER AGE

Developed and presented exclusively by

COMPUTER USAGE EDUCATION, INC.

A SUBSIDIARY OF COMPUTER USAGE COMPANY, INC.


COMPUTER USAGE
STUDY
COURSE



A look at your future career as a computer programmer.

- *What does it mean to be a computer programmer?*
- *What kind of a career does it offer you?*
- *How long will it take for your home training?*
- *How much can you earn?*
- *How does Computer Usage Study Course prepare you for success?*

Back in 1950, questions like these wouldn't have entered your mind.
Only a few computers were being made.
Computer programmers were virtually non-existent.
How different it is today! Computers are in round-the-clock operation everywhere. Industry and government are desperately seeking 50,000 people to write computer programs. SCIENTIFIC AMERICAN magazine has stated that computer programming is "the fastest-growing occupation in the U.S." Computer Usage Study Course is your direct link to a well-paid, secure and respected position in the computer programming field.

What is a computer programmer?

A programmer is the brains behind the computer. The computer can do nothing that a human has not prepared it to do. This article from the NEW YORK TIMES sums it up:

"Contrary to popular opinion, a computer is not a box that performs miracles....

By human standards, a computer is not very bright. But when it is told by man what to do, it performs previously impossible feats because of its speed.

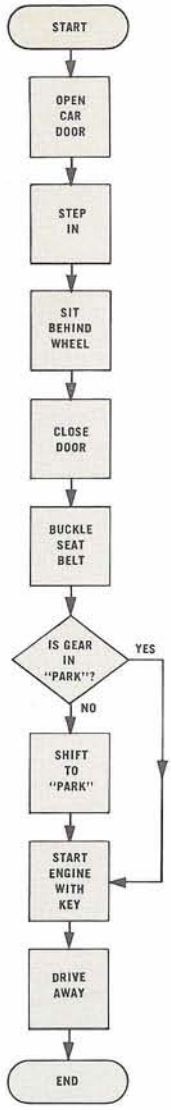
Without a trained person to tell it what to do, a computer is just an expensive electronic moron.

The people who tell computers what to do are called programmers and the instructions they give the machines are called programs."

The programmer gives the computer precise directions for every move that the computer must make. This is just what you learn to do in Computer Usage Study Course—and more!

Here's a simple example. Suppose you are going to program a computer to start a car. The computer can't think. So it's your job to give the computer explicit directions for every move it is supposed to make.

Your program might look like this:



In your program, you give the computer the decision instruction, "Is gear in park?" to make sure it will make the right move at the right time.

The computer simply holds the instructions and alternatives given to it by the programmer. To be a programmer, you must know computers, how they operate, the steps they must perform to carry out their tasks. Computer Usage Study Course gives you this important training.

Almost anyone can learn to be a programmer.

There is no single "programmer" type. If you have an orderly, logical mind and are imaginative, you have the makings of a good programmer.

Contrary to public opinion, you don't have to be an "Einstein" to master programming. A mathematical or technical background is not required, nor should the lack of a college education be a stumbling block. A high school graduate with the right motivation and aptitude can make an excellent programmer.

A recent article in READER'S DIGEST confirms this. It tells of a steamship company which was about to "computerize" its bookkeeping. The company tested all interested employees, many of whom were college graduates. As READER'S DIGEST put it:

"The highest mark was scored by a brawny longshoreman with a high-school education. He became one of the company's top programmers!"

Of course, a college education is useful in programming as it is in many fields. Any background will be useful if it deals with some aspect of the area with which your future programming career will be involved. But the main requirement is *your desire to succeed and the effort you make to do so.*

These high-paying jobs are looking for you!

Computer programmers are never out of work.

The demand for qualified computer programmers increases by the day. According to BUSINESS WEEK magazine, "right now there's a shortage of 55,000 or more of these new professionals." An IBM executive predicts that by 1975 there will be more programmers than doctors. In his opinion, "for the next 10 or 15 years it will be impossible for an able programmer to be out of work." Never before has any one field offered so much opportunity to a person willing to reach out and take it.

But don't confuse a computer *programmer* with a computer *operator*. The operator "pushes the buttons" on the computer. The operator is usually less skilled and earns less than the programmer.

It is the programmer who tells the computer what to do. As a programmer, you will enjoy the status, respect, and salary of a professional. Since programming calls for concentrated, creative thinking, you will work alone, often in your private office, far away from the computer. A messenger takes your program to the computer room and brings back printouts. Only the operator is in contact with the computer. You need never see it when you're working—or when you are enrolled in Computer Usage Study Course.

The Equal Opportunity Field.

The only thing that really counts in programming is your ability and motivation. Programming is truly a field of equal—and open—opportunity. Your sex does not count, nor does color or religion. In an industry which estimates that it could use every college graduate for the next 10 years—and still have a huge shortage of programmers—there just isn't room for discrimination.

Ideal for Women.

The services of men and women as computer programmers are urgently needed in business and industry as well as every level of government. Positions are open within the continental United States and around the world.

You'll like the compensation and the challenge of being associated with the most exciting field the world has ever known.

And when it's *your* program that tells a multi-million dollar computer exactly what to do, you'll enjoy a thrill of satisfying accomplishment.

A short-cut to executive success.

Although the Course prepares you for a career in computer programming, you may wish to take it—not to become a programmer—but to enhance your current position.

You may be employed now by a company whose major decisions are guided —or will be—by a computer. Computer Usage Study Course gives you the complete computer education that may make you the one man in your company who really knows computers.

Such knowledge can prove to be your surest short-cut to a quick promotion and a healthy salary hike.

You master computer applications for a wide range of industries including banking, retailing, publishing, construction, airlines, marketing, and aerospace. This practical experience enables you to assist management in solving computer problems within your own organization. You automatically increase your value and usefulness to your company.

Computer programmers earn more money.

When you complete Computer Usage Study Course, you are a trained programmer.

You are *not* a trainee because Computer Usage Study Course serves as your "on-the-job" training. When you finish the Course, you will have *proof* of your programming proficiency: a portfolio of at least 24 computer print-outs of your programs. This is the working equivalent of one year's field experience. Thus, you will be qualified at once for a regular programming position.

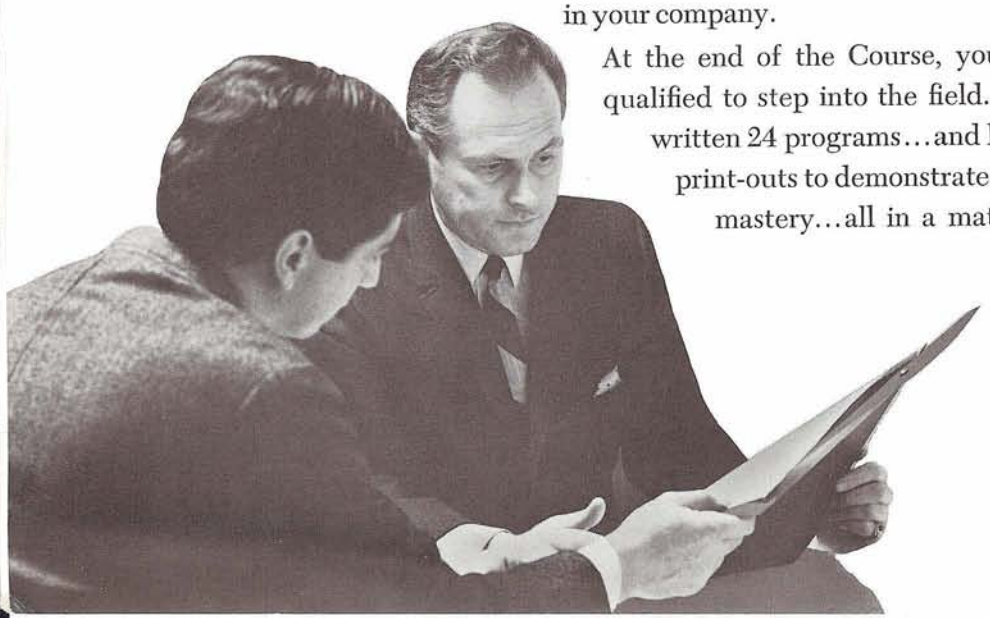
Starting salaries vary according to region. However, their general trend is *up*. You can expect to earn from $6,000 to $7,000 or more. After three years, you may earn from $10,000 to $12,000. After five years, you'll be in a position to increase your salary even more—and advance to a managerial slot.

You can qualify in months.

Even though you have three full years to complete Computer Usage Study Course, it should only take you from 8 to 14 months. You work at home, at your own rate of speed. Naturally, the more time you can spend on your lessons, the faster you will finish. By studying alone, you are unhampered by slower students who might delay your progress in the classroom. You are free to concentrate on any section of the Course that particularly interests you.

Studying at home permits you to continue with your present employment until you are prepared to enter the field. If you wish to keep your studies confidential, you can do so since all material is mailed to you.

The only pressure to complete your Course will come from you—and your desire to move ahead as a computer programmer or as the computer "expert" in your company.



At the end of the Course, you will be fully qualified to step into the field. You will have written 24 programs...and have the actual print-outs to demonstrate your computer mastery...all in a matter of months.

Our Job Referral Service is free to all who complete our Course.

Use it whenever you wish, as often as you wish. The staff has contact with job opportunities in every area dealing with computer programming. Warm and understanding counselors will do their utmost to help you find your first computer position. The rapid growth of the field makes job referrals easy. Your training qualifies you at once.

During your course of study, our Student Service Department will gladly guide you.

This department offers career guidance and counseling to all Computer Usage Study Course students. Friendly advisors who know all about computer programmers as people as well as professionals, will promptly answer your questions about training, equipment, and job availabilities. The sole mission of the Student Service Department is to help you.

The price of the Course includes everything.

Computer Usage Study Course includes use of our IBM System/360. During your study, the computer will run from 24 to 34 programs for you. You pay nothing extra to have your programs run. We offer this service as part of the Course.

In addition to computer time, you get all 24 four-part lessons, textbook, workbook, reading references, coding and flowchart forms, template—whatever you require to complete your studies—for the single price of the Course.

Termination/Withdrawal Policy protects you

A liberal termination/withdrawal policy protects your interests. If, after a few lessons, you show poor progress and an unlikelihood of profiting from the Course, your registration will be terminated and proportionate refund made according to a set schedule.

If you wish to withdraw from the Course, for any reason, you may do so and receive a refund as scheduled.

This is your Completion Certificate.

It is awarded to you when you have satisfactorily completed Computer Usage Study Course. Framed and hung in your home or office, this certificate proudly signifies that you have received the finest home study training in computer programming. It confirms your dedication to learning and your skill as a computer programmer.

Learn programming...by programming.

In programming, as in any other profession, practice makes perfect. Computer Usage Study Course gives you plenty of programming practice as well as the opportunity to have your program run on the latest computer, the IBM System/360.

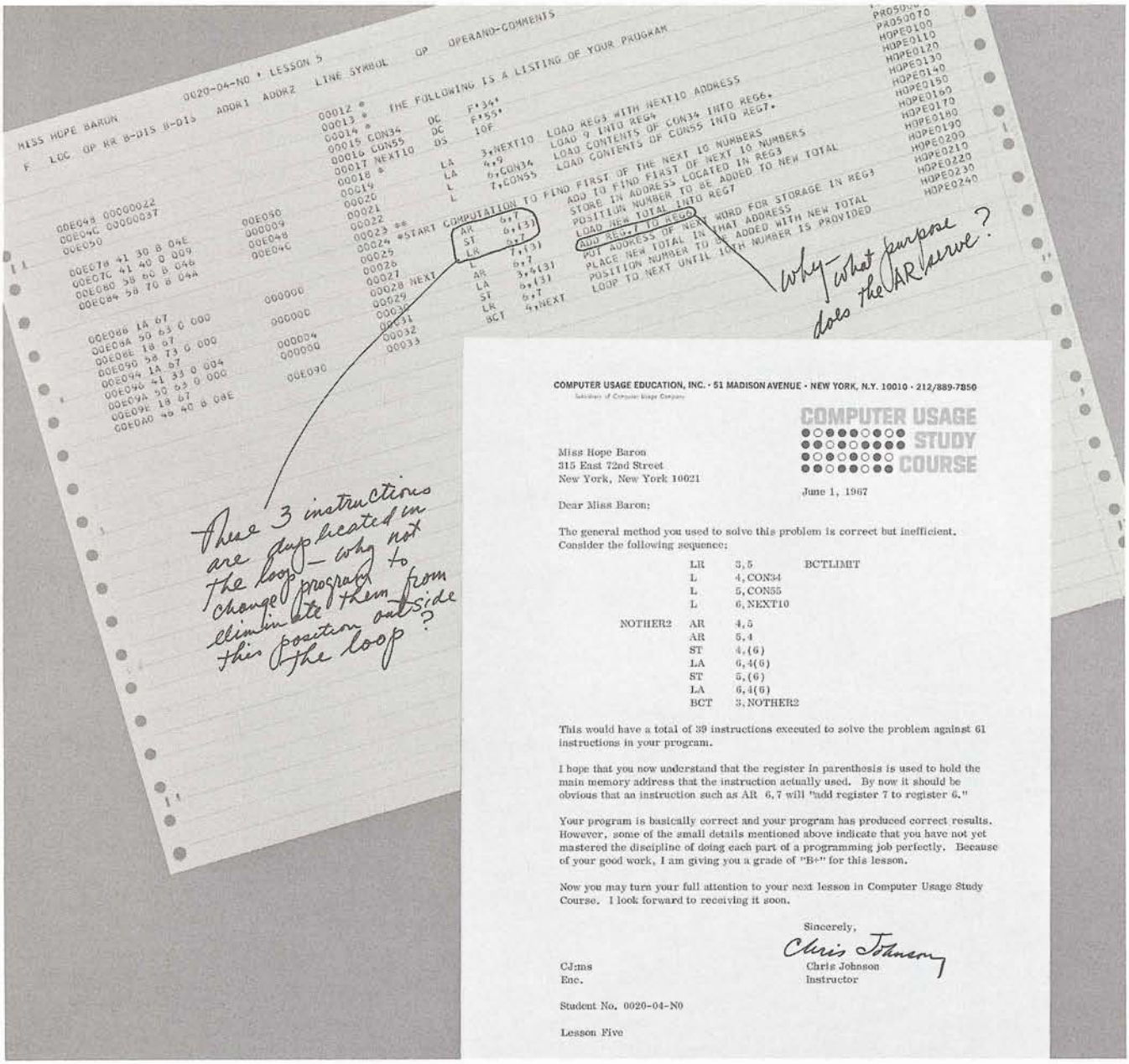
It is not necessary for you to be in physical contact with a computer. A programmer has no need to *see* one or to *operate* one. A programmer works alone, usually in a private office. He sends his programs to the computer room for running.

Computer Usage Study Course simulates the conditions under which you will later work as a programmer. You study at home, programming alone. You prepare flowcharts indicating the operation sequence.

But before your program is run, it is checked by your instructor.

The actual computer print-out, with your instructor's comments, is returned to you for your permanent portfolio.

Your instructor's personal detailed letter accompanies the print-out. He tells you what you did right—and wrong. He advises you on proper procedures with suggestions geared to your specific needs. He knows exactly how to help you because he is teaching you the same way CUC taught him. He enjoys your success as much as you do.



COMPUTER USAGE EDUCATION, INC. · 51 MADISON AVENUE · NEW YORK, N.Y. 10010 · 212/889-7850

Subsidiary of Computer Usage Company

COMPUTER USAGE STUDY COURSE

Miss Hope Baron
315 East 72nd Street
New York, New York 10021

June 1, 1967

Dear Miss Baron:

The general method you used to solve this problem is correct but inefficient. Consider the following sequence:

```
        LR      3,5         BCTLIMT
        L       4,CON34
        L       5,CON55
        L       6,NEXT10
NOTHER2 AR      4,5
        AR      5,4
        ST      4,(6)
        LA      6,4(6)
        ST      5,(6)
        LA      6,4(6)
        BCT     3,NOTHER2
```

This would have a total of 39 instructions executed to solve the problem against 61 instructions in your program.

I hope that you now understand that the register in parenthesis is used to hold the main memory address that the instruction actually used. By now it should be obvious that an instruction such as AR 6,7 will "add register 7 to register 6."

Your program is basically correct and your program has produced correct results. However, some of the small details mentioned above indicate that you have not yet mastered the discipline of doing each part of a programming job perfectly. Because of your good work, I am giving you a grade of "B+" for this lesson.

Now you may turn your full attention to your next lesson in Computer Usage Study Course. I look forward to receiving it soon.

Sincerely,

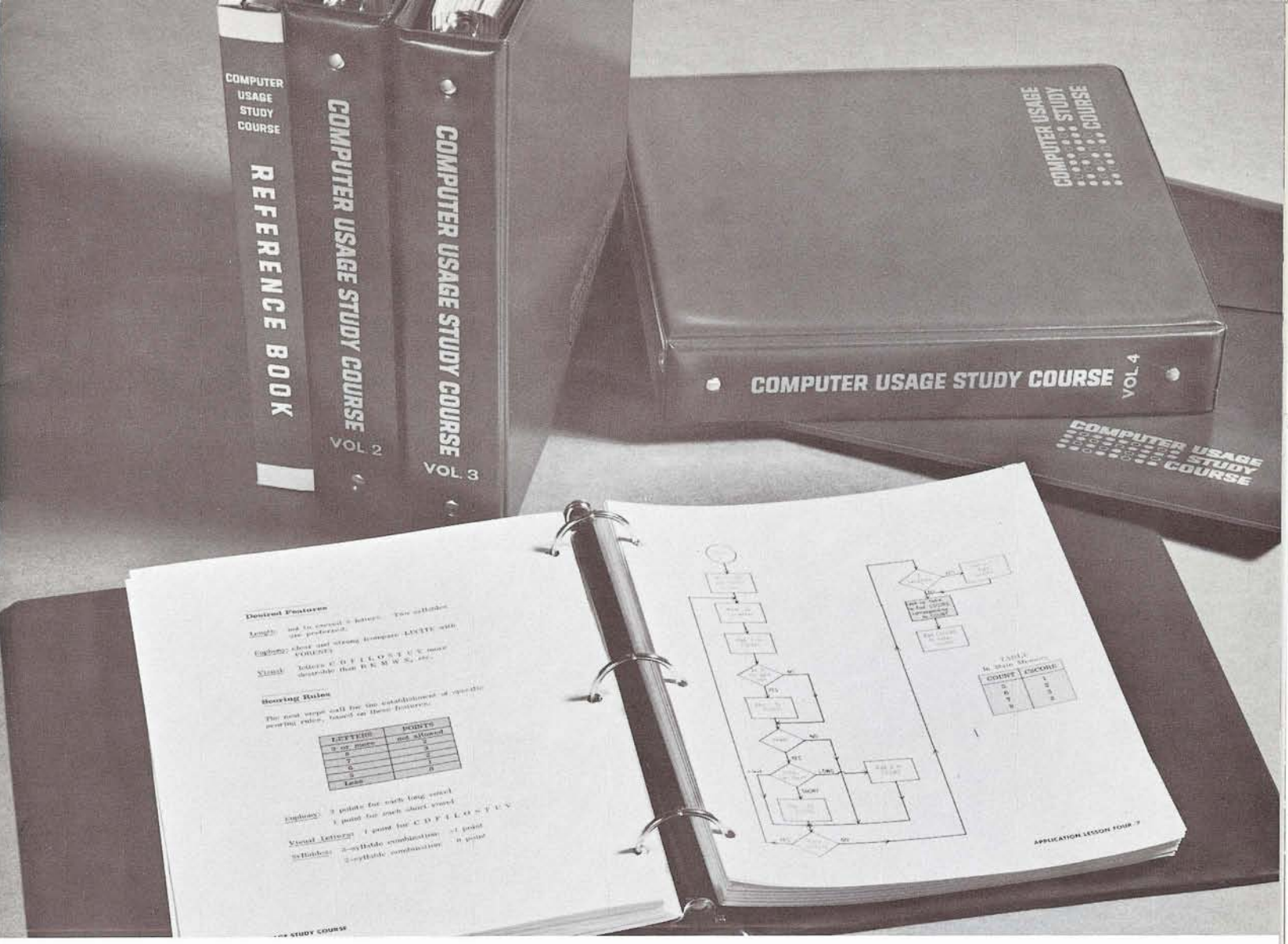
Chris Johnson

Chris Johnson
Instructor

CJ:ms
Enc.

Student No. 0020-04-N0

Lesson Five



This is Computer Usage Study Course.

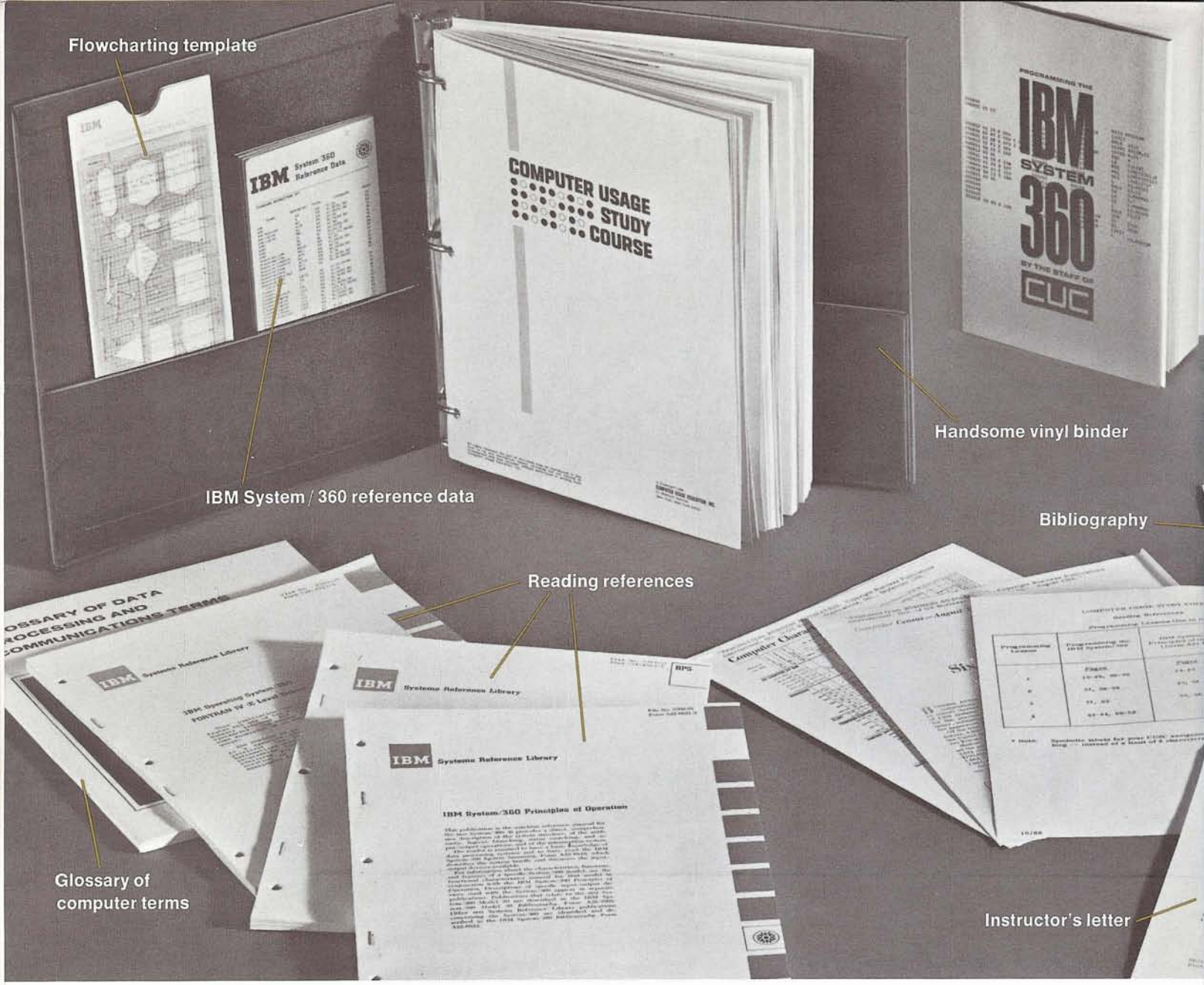
It offers you a comprehensive education in computer programming, background, and applications. The Course material is the equivalent of five University extension courses: System/360 Programming, Fortran IV Programming, Cobol Programming, Computer Fundamentals, and Computer Applications.

You receive a complete portfolio of computer and programming supplies—everything you need to master computers.

The Course material contains more than 1,000 large looseleaf pages, color-coded for easy reference. It is printed in clear, easy-to-read type with hundreds of special charts, illustrations, and photos.

- There are 24 lessons in all. You receive a set of four handsome vinyl binders to store your lessons during your instruction. After you complete the Course, these binders provide a permanent library of modern computer programming techniques for ready referral.
- You receive the only available book on IBM System/360 programming. It is the 316-page *Programming the IBM System/360*, written by the staff of Computer Usage Company, published by John Wiley and Sons. The single volume covers techniques used by experienced programmers. It is included with your Course.
- You receive a full package of programming and computer instruction supplies. It includes a Reference Book containing manuals and reference materials, Programming Assignment Workbook in which to keep corrected coding forms and computer print-outs, a complete supply of Coding and Flowchart Forms, Instructor Query Forms, and a Flowchart Template you will use throughout your career.
- In addition, you receive 24 Lesson Cards. Each one authorizes a run of your programs on our IBM System/360. Finally, you receive 10 "rerun" cards, authorizing you to improve 10 assignments on the System/360, if you wish.

All in all, you receive over 20 pounds of materials to help you master computer programming!



There are 24 lessons–with 4 parts to each lesson.

24 *background* lessons

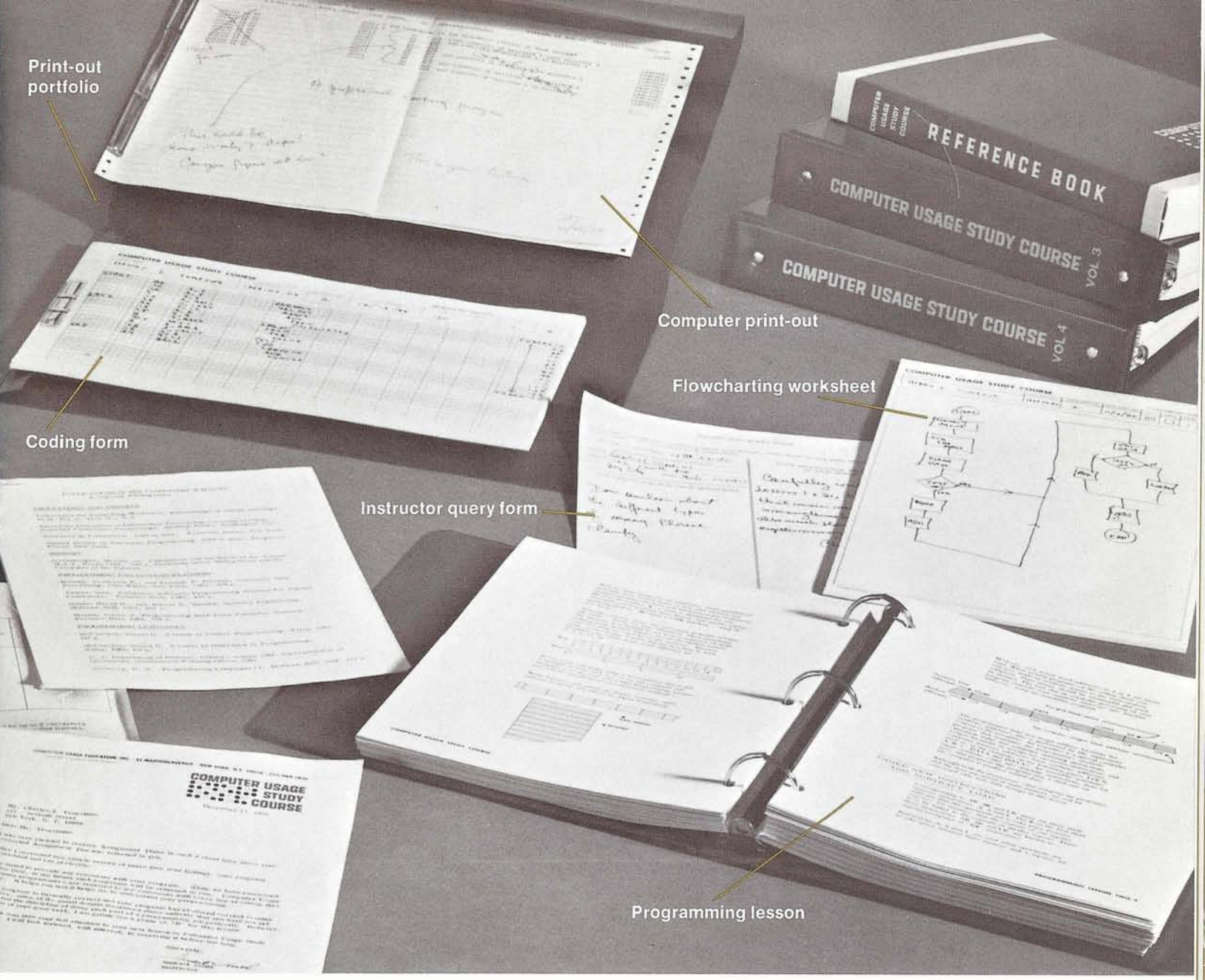
summarize the world of computers for you in simple steps.

- Programmers, Computers, and the Problems They Solve
- The History of Calculating Machines
- How Computers Operate
- The Development of Electronic Computers
- The Computer Manufacturing Industry
- Computer Centers and How They Operate
- Positions in the Computer Industry
- The Work and Tools of the Systems Analyst
- Business Data Processing
- Techniques for Computing Scientific Problems
- Unit Record Input/Output Devices
- Magnetic Input/Output Devices
- Fortran, Cobol and Other Programming Languages
- Software Systems
- Real-time Computing and Tele-Computing
- Multiprogramming
- Time Sharing
- Files and Records
- Sorts and Merges
- Debugging
- Specifying and Documenting Computer Programs
- Standards in Computing
- The Literature of Computing
- Professionalism

24 *application* lessons

explain the computer in actual use in a multitude of areas.

- Savings Banks and Computers
- Computers in Inventory Control
- Medical Diagnosis by Computer
- Computer-Produced Trade Names
- Subscription Fulfillment
- Computers in Production Control
- Navigation by Computer
- Computer-Aided Typesetting
- Computers for Payroll Systems
- Highway Design Engineering
- Computers in Airline Reservations Systems
- Information Storage and Retrieval
- Plot Subdivision and Computer-Aided Civil Engineering
- Statistical Computing
- Designing Computers by Computers
- Scheduling Classes for High Schools and Colleges
- Linear Programming
- Business Report Generating
- Computers in Market Research
- Questionnaire Interpretation by Computer
- Computer-Aided Design
- Job-Shop Scheduling
- Tracking Space Vehicles
- Management Information Systems



1 **The first part is a background lesson** on a fundamental computer topic. It is designed to give you a complete understanding of computer principles, equipment, and professional practices. After 24 lessons, you will be fully familiar with the history and growth of computers, how they operate, and the professional computer world.

2 **The second part is an application lesson.** Each deals with a specific example of how computers are used to process data. Each is an actual application drawn from Computer Usage case files—real-life programming assignments performed for many of the world's largest organizations.

3 **The third part is a programming lesson** to teach you actual computer programming. These lessons are the distillation of our experience in training hundreds of Computer Usage Company programmers. No guesswork here. You follow easy-to-master procedures for programming on the third-generation IBM System/360—the computer which has made most other IBM computers obsolete. You also learn two programming languages: Fortran and Cobol.

4 **The fourth part is your programming assignment.** The only real way to learn computer programming is to *do* it. From your very first lesson on, you write actual programs to be run on our IBM System/360. By the end of the Course, you will have run 24 programs—with returned printouts to prove it.

Here are sample pages from actual lessons.

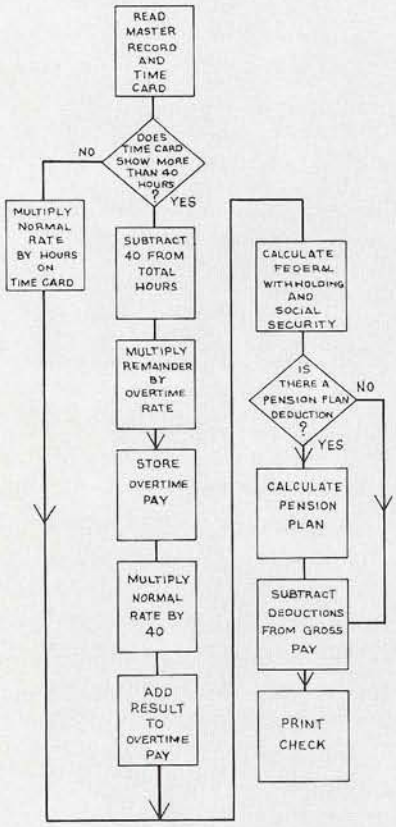
Sample background page from Lesson 1: *Programmers, Computers and the Problems They Solve.*

Looking further into
the programmer's role, it can be broken down into
these steps:

1. *Specifying the task*
2. *Planning*
3. *Flowcharting*
4. *Coding*
5. *Debugging*
6. *Testing*
7. *Documentation.*

In *specifying the task*, you collect every piece of information that will help you fully define the job to be done, including all its ramifications.

In *planning*, you break the problem down into its components and work out the best approach to the solution.



Part of planning consists of constructing a *processing-flow* diagram and a program *flowchart*. The processing-flow diagram shows each part of the total problem, including data sources, computer components, operations to be performed and the logical relationship of each part to the others. A program flowchart is a diagramed representation of the major steps performed by the computer within a single program.

Coding, the heart of programming, is the process in which you write the step-by-step instructions that take the computer through its operations.

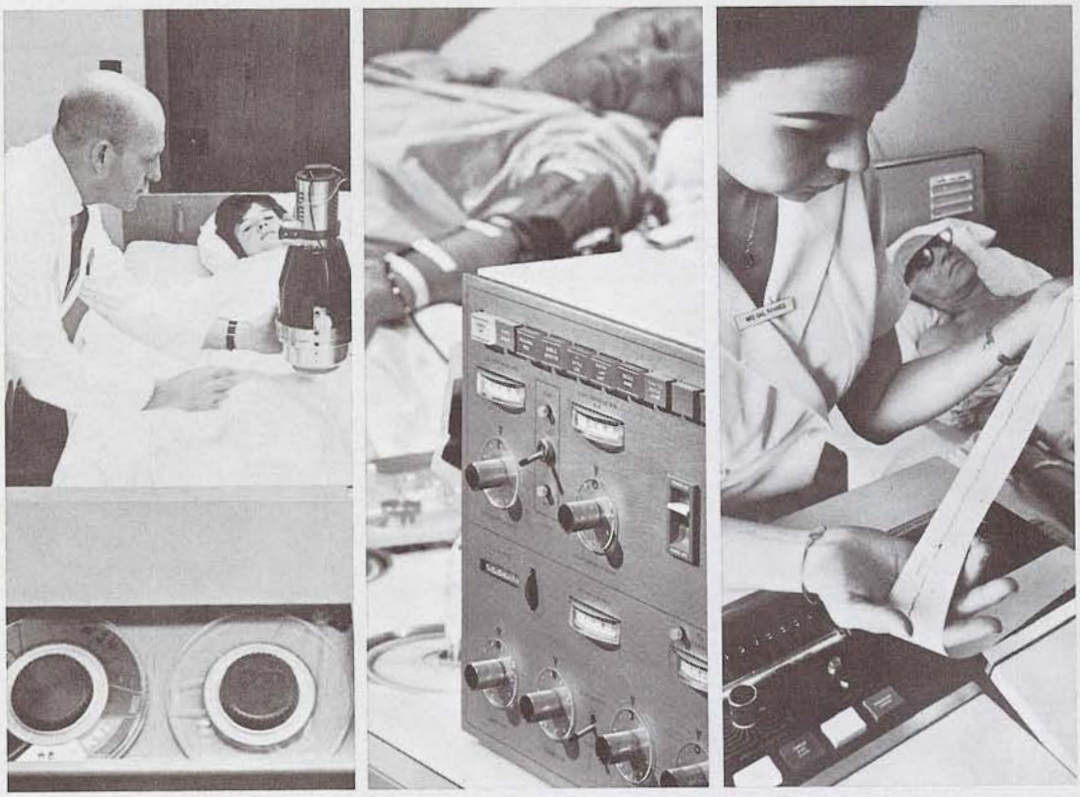
After a program is coded and then keypunched into cards, it must be checked for accuracy, or "*debugged.*" First you perform *desk debugging*, checking out every step by hand using pencil and paper. In machine debugging, you will put the program on a computer and check its accuracy in actual operation.

Although debugging ensures that a program will run as planned, the program still has to be *tested* with real data to make sure that all the possibilities and variations have been covered, that all loopholes have been plugged. In a computer installation, *parallel running* is an often-used

NOTE: In the actual Course, each of these sections appear on different colored paper for easy reference.

(Regular size of lesson page is 8½ by 11 inches)

Since computer applications of this nature must be based on extensive medical data, the computer may also be used in compiling statistical data which relate *symptom-disease combinations* and which evaluate *disease-treatment combinations* with the results of each treatment. This information is then used in further diagnosis, treatment recommendations, and determination of the future course of the disease.



Computers help obtain quantitative criteria by processing data obtained from diagnostic instruments and tests (for example, blood tests, electrocardiograms, etc.). It performs the complicated data reduction calculations in a fraction of the time a person would take to do the same calculation. It also reduces the possibility of error. In a life-and-death situation, these two factors may become of paramount importance.

The beginning of each section in each lesson is clearly and attractively marked for you.

Introduction

In your second lesson, you'll study:

1. The characteristics of the main memory of the IBM System/360
2. Four new instructions which operate with one register and one unit of main memory
3. How to write a statement in your program to place a number in main memory.
4. How to write an instruction in your program to load a given number into a register. (In Programming Lesson One, you were told that the numbers were already stored in certain registers.)

Main Memory

The main memory of a computer is that portion in which programs and data may be stored. In our diagram of System/360, the main-memory block is shown larger than the other blocks to emphasize the vast amount of data that can be stored, often thousands of times as much information as in the registers.

The main memory can contain data, instructions, tables and everything else that will be needed in the course of a computation. Indeed, the large System/360 main memories can hold all that is required for a group of programs.

```
*THIS IS THE DATA DECLARATION FOR PROGRAM VI A.
HOURS     DS    1F
OVRATE    DS    1F
RATE      DS    1F                  NORMAL PAY RATE
GROSSPAY  DS    1F
CON40     DC    F'40'
**
*COMPUTE PAY FOR HOURS WORKED
**FIRST DETERMINE IF OVERTIME PAY IS DUE
WORKPAY   SR    5,5                 ZERO REGISTER 5
          L     4,HOURS
          C     4,CON40             IS THERE ANY OVERTIME
          BNH   NORM                NO, SKIP OVERTIME PAY CALCULATION
**COMPUTE OVERTIME PAY DUE
          S     4,CON40             COMPUTE OVERTIME HOURS
          L     3,OVRATE            SET UP ODD REGISTER FOR MULTIPLICA-
*                                       TION WITH EVEN/ODD PAIR
          MR    2,4                 COMPUTE OVERTIME PAY (REG 3)
          LR    5,3                 SAVE OVERTIME PAY (REG 5)
          L     4,CON40             SET UP REGULAR HOURS
**COMPUTE NORMAL PAY DUE AND ADD OVERTIME PAY IF ANY
**
NORM      L     3,RATE              LOAD ODD REGISTER WITH MULTIPLICAND
          MR    2,4                 COMPUTE NORMAL PAY (REG 3)
          AR    3,5                 ADD OVERTIME PAY (IF ANY)
FINISH    ST    3,GROSSPAY          STORE GROSS PAY
```

Program VI A

Note that the program just given can be changed to reflect a shorter normal-pay-rate work period by changing only the value stored at CON40.

Programming Problem 7: Statement

To illustrate relative addressing and also other uses of the instructions you studied in Programming Lesson 4, study Program VII which solves the following problem. The quantity on hand of an inventory item and the re-order level quantity for that item are in main memory. Also in main memory are from one through three transaction records affecting that item. Each transaction record is either a receipt of this item into stock (a positive number) or a chargeout of this item (a negative number). Compute the resulting quantity on hand and determine whether the item must be re-ordered. To avoid a false re-order indication, add all receipts to the initial quantity on hand before any chargeouts are handled. If the quantity on hand

How you study at home.

From the moment of your enrollment in Computer Usage Study Course, you learn at home in close contact with both professional programming instructors and the computer. You work steadily and surely towards your goal.

1

A professional computer programmer works alone in the privacy of his office. You can learn programming the same way in the comfort of your own home—at your own speed.

4

The program which you have written at home is now processed by the same procedures used with regular programs. It is punched into IBM cards in our keypunch room.

7

Your instructor takes a personal interest in your program. Here, he is watching the results of your program as it emerges from the high-speed printer.

8

Your instructor studies your printout in detail. He writes constructive comments right on your printout, with suggestions on how to improve your program. He should know. He's a "pro."

2

You write programs, starting with Lesson One. Your instruction supplies include all the materials you require. These materials duplicate those used by Computer Usage Company programmers. You actually perform the job of a computer programmer—at home.

3

Your instructor is an expert CUC programmer himself. He checks your programs before they are run on our computer to make absolutely certain you have understood the lessons.

5

Your program is being fed into the card reader of our IBM System/360. Now it is ready to run.

6

Our IBM System/360 computer is all set to run your program. Once the operator presses the button, *your* program tells the computer what to do. You command a multi-million dollar machine.

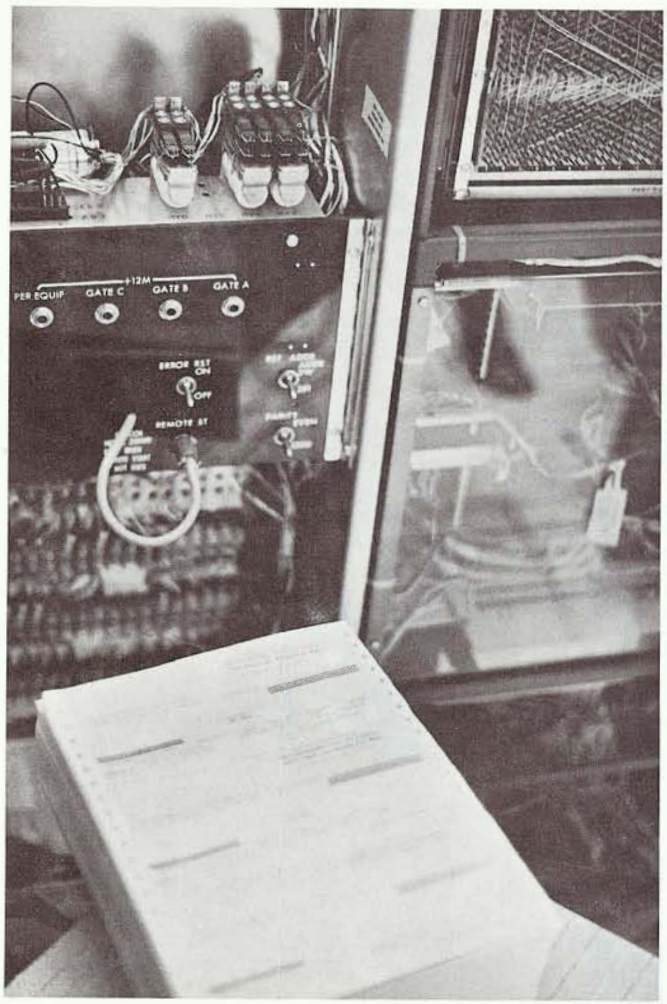
9

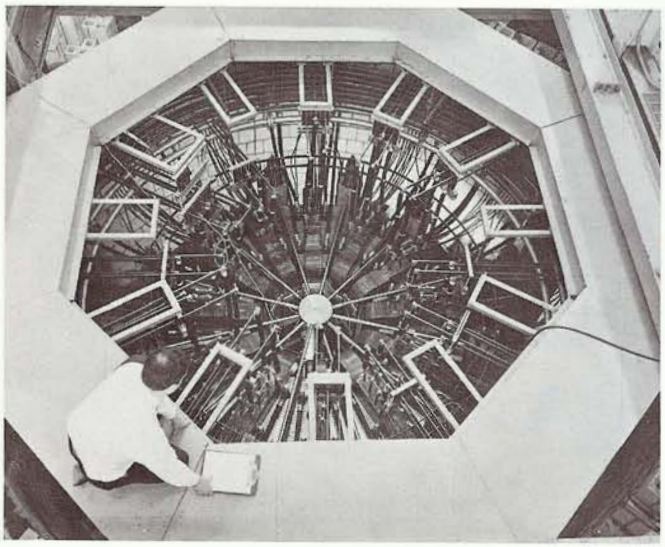
Your instructor dictates a personal letter to you. He tells you in detail just what you should do to improve your programming skills. His evaluation of your progress offers valuable guidance for your next lesson.

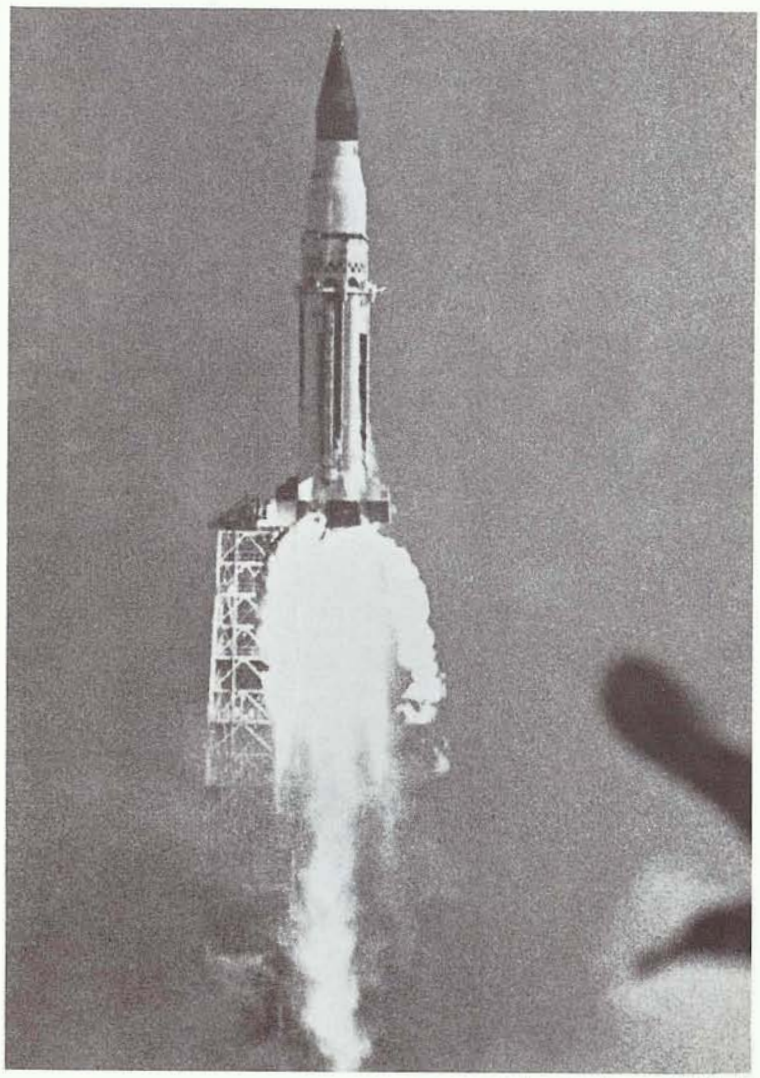
10

You've received your printout with your instructor's comments and detailed letter. You're ready for your next lesson. You're learning to be an expert because you are working with an expert.

Study with one of the world's foremost programming firms.







Computer Usage Study Course is offered by Computer Usage Education, a subsidiary of Computer Usage Company, Inc., one of the world's oldest and largest computer programming organizations.

Since its start 11 years ago, CUC has completed over 3,000 programs for such business giants as IBM, AT & T, GE, as well as Federal, State, and municipal departments.

Well-known and highly regarded as a pioneer in the programming field, CUC performs its work behind the scenes. Many of the projects with which it has been associated have made headline news.

In space: CUC helped develop the Surveyor which successfully reached the moon on its first flight.

In medicine: CUC helped develop programs to diagnose heart disease through computerized techniques.

In transportation: CUC helped develop a national system of air traffic control to make travel safe and faster.

In marketing, finance, defense, science, management, CUC continues to make news with an expertise in programming that is second to none.

To share its vast experience and knowledge, Computer Usage Education also offers a series of world-wide educational seminars dealing with the most modern data processing methods and analytical techniques. Many of the foremost executives and department heads of major business organizations attend these meetings throughout the United States and in Europe.

Now, to fill the enormous demand for trained computer programmers, CUE has developed the unique Computer Usage Study Course described in this booklet.

Every instructor in the Course is also a professional Computer Usage Company programmer, trained by the same methods pioneered by the Company and distilled into your Course. *Barron's Weekly* calls them "the deepest and most experienced group of EDP programmers in the business."

These instructors offer more than just knowledge. Each has demonstrated a pronounced flair for teaching combined with genuine empathy. Their dedication to your interests is paralleled by a truly superior home study course. That's why Computer Usage Study Course is so singularly prepared to help you achieve success.

Some of the clients served by Computer Usage Company

American Airlines
American Cyanamid Company
American Telephone and Telegraph Company
Ampex Corporation
Arthur D. Little, Inc.
Atomic Power Development Associates
Baltimore and Ohio Railroad
Beckman Instruments
Bell Telephone Laboratories
Bendix Corporation
Broadcast Music Inc.
Burroughs Corporation
Columbia Broadcasting System, Inc.
Continental Oil Company
Curtiss-Wright Corporation
Dennison Manufacturing Company
Digitronics
Douglas Aircraft Company
Dun and Bradstreet
Equitable Life Assurance Society
Esso Research and Engineering Company
General Electric Company
General Foods Corporation
General Motors Acceptance Corp.
General Telephone Laboratories
Great American Insurance Company
Grumman Aircraft Corp.
Home Life Insurance Corp.
Honeywell Inc.
Hughes Aircraft Company
Humble Oil & Refining Co.
IBM World Trade Corp.
International Business Machines Corporation
Kollsman Instrument Corporation
Litton Systems, Inc.
Lockheed Missiles and Space Company
Loew's Hotels
Los Angeles Newspaper Service Bureau
Manhattan Life Insurance Co.
Martin-Marietta Corp.
McGraw-Hill Publishing Company
Melpar, Inc.
Merck & Company, Inc.
Metro-Goldwyn-Mayer Inc.
Metropolitan Life Insurance Company
National Shirt Company
New England Power Service Company
North American Aviation, Inc.
Pacific Gas and Electric Company
Philco-Ford Corporation
Prudential Life Insurance Company of America
Radio Corporation of America
Raytheon Company
Republic Aviation Corporation
Schaefer Brewing Company
Schering Corporation
Shell Development Company
Shell Oil Company
Socony Mobil Oil Company
Space Technology Laboratory
Sperry Gyroscope Division, Sperry Rand Corp.
Standard Oil Company of California
Standard Oil Company (New Jersey)
State of California, Department of Education
State Street Bank & Trust Company
Sylvania Electric Products, Inc.
Tidewater Oil Company
Union Carbide Corporation
United Aircraft of Canada
United States Rubber Corp.
U.S. Air Force Office of Scientific Research
U.S. Department of the Army
U.S. Department of Defense
U.S. Department of Commerce
U.S. Federal Aviation Agency
U.S. Forestry Service
U.S. National Aeronautics and Space Administration
U.S. National Institutes of Health
U.S. Naval Weapons Laboratory
Westinghouse Electric Corporation
W. R. Grace and Company

You are holding your future in your hands.

"As you read through this booklet, you become aware of only a portion of the vast opportunities in the computer field. For more than a decade, CUC has trained scores of programmers who are today's leading professionals. This training helped to evolve the methods taught by Computer Usage Study Course. Our techniques are practical applications of the principle that *you learn by doing* under the supervision of expert computer programmers.

Our staff looks forward to working with you. And now you can look forward to an exciting and financially-rewarding career."

DEAN BROWN
Enrollment Director, Computer Usage Education, Inc.

Dr. Dean Brown, Enrollment Director, has a broad background in scientific and computing projects. He holds MA and Ph.D. degrees in theoretical physics, and has spent many years in the nuclear industry. For several years he was manager of the computing center at du Pont's nuclear laboratories, and he later served as Scientific Director of Computer Usage in Washington. He has held positions in the Norwegian Institute for Atomic Energy and the International Atomic Energy Agency in Austria. Dr. Brown is an editor of Nuclear Science and Engineering.

The Nation's press agrees:

New York Post: *"Computer-created jobs need trained personnel. In the next five years, many with only a high school education will move into this new, economically secure profession."*

National Underwriter: *"Shortage of computer personnel seen at famine stage by 1970."*

Popular Electronics: *"Computer programming is a wide-open field for any intelligent person willing to take a special training course. The pay is high."*

Business Automation: *"Continuing 'up' trend in data processing salaries helped along by the extreme country-wide shortage of qualified EDP personnel."*

New York Times: *"Most college graduates starting in a training program earn close to $8,000 a year. Experienced programmers can command $10,000 to $15,000. Programming specialists, of course, reach higher brackets."*

Systems: *"Not uncommon today for a comparatively young girl to earn almost $200 a week as a programmer."*

Business Week: *"A couple of years experience brings $10,000 to $12,000; special know-how in programming brings $15,000 or more."*

Questions & Answers

about Computer Usage Study Course

How much can I expect to earn as a programmer?

Starting salaries vary somewhat across the country. In general, however, if you complete Computer Usage Study Course and have a high school education, you can anticipate starting at $6,000 per year. College graduates generally begin at $7,000—or even higher, since beginning salaries in this field are continually increasing. The best way for you to check locally is to look in newspaper "Help Wanted" listings—remembering that if you complete our course you do not begin as a trainee, but as a *programmer.*

Advancement: Many programmers earn up to $10,000 with 3 years' experience. After 5 years, they may advance to the position of Systems Analyst, earning up to $14,000. Finally, if you do well and demonstrate good potential, you may be considered for further promotion. *Computers & Automation Magazine* noted, in its August, 1965 issue, "Data processing and systems personnel have more opportunity to get into more functional areas of a business than any other group of a company's employees. Therefore, these people should be selected and trained as good management potential."

Can I master programming if I was a poor math student?

Any professional computer programmer will tell you that an aptitude for mathematics is not essential for a programmer. The important requirement is a sound, logical, orderly mind. At Computer Usage Company, successful programmers have been musicians, secretaries, and English students.

Do you guarantee me a job when I finish the Course?

No, but we'll do our utmost to help you find one. When you graduate, you have free and lifetime use of our Job Referral Service. We're ready to help you as often and as many times as you wish. This service begins *before* you graduate. With your 22nd lesson, you'll receive a confidential Employment Form to help us place you. We will locate openings for you according to your company and locale preference.

Your portfolio of 24 printouts will be extremely valuable in landing a job. It is visible proof of your programming proficiency and shows that you have the working equivalent of one full year's actual experience in the field. It's a powerful "interview-opener" and "job-getter."

What does "printout" mean?

A printout is a printed form showing the result of the computer's calculations. Since they are turned out by the computer's printer, they are called printouts. You receive one or more printouts with each lesson. Your instructor adds his comments to the printout so that you can fully understand each specific procedure.

With your first assignment, you also receive the keypunched cards used to give your programming instructions to the IBM System/360. We want you to understand this key element in computing. Computer Usage Study Course omits nothing. It is comprehensively complete down to the last detail.

Can I actually master computers—at home—without seeing or being near one?

Yes! In fact, with the deepest experience in training programmers in the business, Computer Usage Education firmly states that home study is the best way for you to learn! You study at home—alone, just the way a programmer works in his office—alone.

Programmers, in fact, are usually located far from the computer room. Messengers take their programs to the machine and bring back printouts. Only the operator must be in physical contact with the computer—the programmer need never see it.

Can I study while I am in the Service?

Yes. The Armed Forces encourages self-improvement training from qualified home study courses. Such training may also count toward promotion. During Service, you may have more time to devote to your studies and so finish faster. While the careers of other servicemen may be interrupted, yours will still be continuing—and if you plan to remain in the Service, there are many opportunities to use your computer know-how in every branch. Wherever possible, your lessons and personalized instruction will follow you while you are in the Service. If, for some reason, you find it necessary to delay completing the Course during Service, we'll gladly allow an extension.

Questions & Answers

Will I work with just one instructor for the whole Course?

No. Your programs will be corrected by an instructor who is a specialist in that area. Thus, you get the benefit of many of the top professionals in the field who also know how to teach.

Of what use is computer programming in my present job?

Some of our students do not plan to practice programming professionally. They take the Course to learn as much about the computer field as possible. They become the one man in their company who understands computers. It enables them to forge ahead in salary, position, and status. The Course also gives them a skill which they can always employ: computer programming.

Are there any other Courses like yours?

No. Computer Usage Study Course is unique because it is based on our own methods and techniques as professional computer programmers.

Whom do I contact if I have any problems during my Course?

Check with your instructor on the form provided for you with the Course. Or get in touch with our Student Services Department which was established specifically to help you get over any rough spots.

How long can I take to finish the Course?

Ordinarily, the Course can be completed in 8 to 14 months. However, you may take up to three full years. If you need even more time, you can apply for an extension based on a valid reason. We'll do our best to grant it.

Can the cost of the Course count as an income tax deduction?

If you are already in the computer field, or if the Course will improve your position in your business or career, the cost may be deducted as a business expense. Before making this deduction, however, you should check with a qualified expert to make sure that it meets legal requirements.

Can a woman become a successful programmer?

Yes, indeed. Programming is ideal for a woman, even if she is married and has children. Women make excellent programmers and abound in the field.

Why study the IBM System/360?

System/360 is IBM's latest computer. Perhaps you have heard it referred to as a "third-generation" computer. It is the most in-demand computer available. As of the end of 1966, 4,000 of these computers were in operation. 20,000 more will be placed in 1967 and 1968. Very few trained System/360 programmers are available for them. Of the 100,000 new programmers needed in the next five years, those who know the System/360 will be most in demand.

This computer is so new that Computer Usage Education is one of the very few educational institutions offering System/360 training. In fact, our parent company pioneered programming techniques for the System/360 and wrote the only book on it available today.

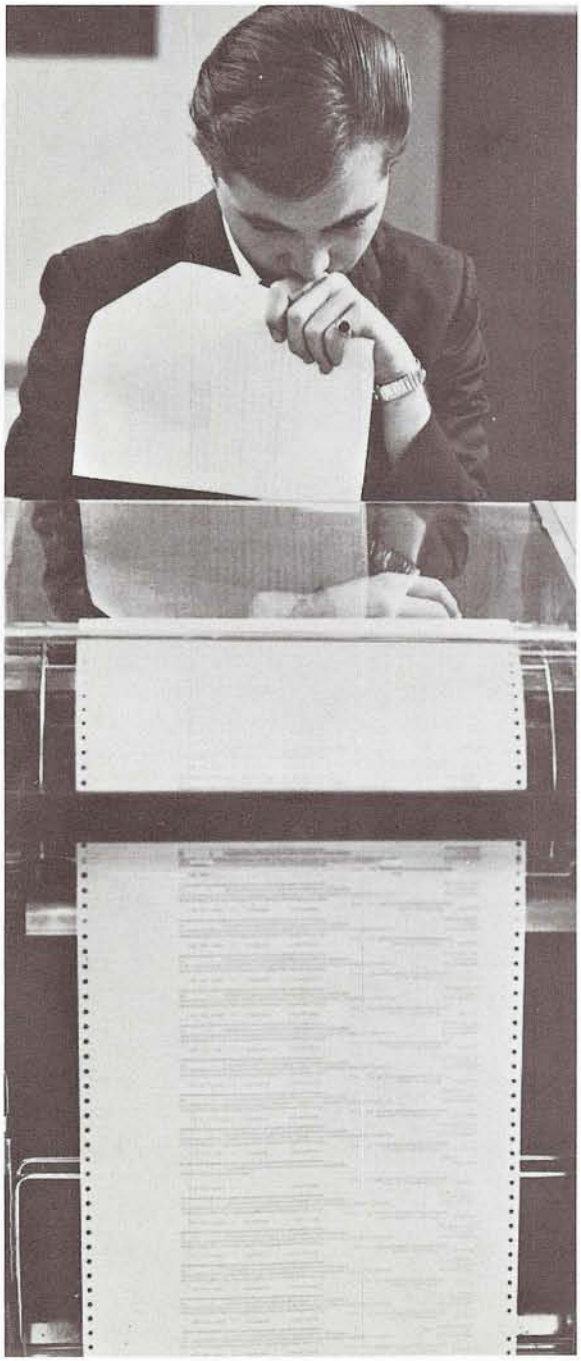
Will my company pay for this course?

Many companies do. Send for our booklet E, which spells out the benefits to your company of your computer education.

Can I get my money back if I don't like the Course?

Yes. You will be given a liberal refund if you wish to withdraw. Where state laws permit, we follow the exact policy recommended by the National Home Study Council. *Withdrawal requests are handled at once.* And, if we determine, on our own and without your request, that you will not benefit from the Course, you will receive a refund of a substantial portion of your tuition. Thus, you are protected two ways: if you withdraw or if we terminate your enrollment.

Years from now, you'll remember this moment.



This is your moment of decision. All the facts on the challenge and opportunity offered by Computer Usage Study Course have been presented for your review. It should be readily apparent that a knowledge of computers and a developed skill as a computer programmer will enable you to take your place in the computer age and move ahead to a more financially secure future and a prestige-filled career.

You have shown your interest and desire for greater self-fulfillment by reading this booklet. That was the first step. The next step leads you directly into the world of computers, guided by all the resources at our command.

Years from today, you'll remember this as the moment you said "yes" to your future—by signing and returning your Enrollment Application.

Do it today. You'll always be glad you did!

COMPUTER USAGE STUDY COURSE
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