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Learn BASIC and run your computer

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You will almost certainly be given a version of the BASIC (Beginners All Purpose Symbolic Instruction Code) language with your system, no matter which computer you buy. It might be in Read Only Memory (ROM), on a plug-in cartridge,

zines and books publish BASIC program listing which you can study to learn new techniques. Many user groups, schools, and other organizations offer classes in BASIC programming. At some point of time in future if you decide to buy a

words function virtually identically in all versions of BASIC.

There are other languages available having their good points too. BASIC though it is a powerful language but it is not perfect. You will hear proponents of other languages making comparisons between their favourite language and BASIC. You do not hear frequently someone say, "C is a good language because it has many features that forth lacks." That is because BASIC is the standard against which others are judged. The most popular language, it has survived for twentyfive years and possibly will be in use for at least another twentyfive years.

One of BASIC's most attractive feature is that it is interactive. You can sit down at a keyboard, type in a few lines, and then type RUN. There is no need to wait while you save the source code, compile and link it, and hope that it works. You just type the command RUN. The program will either run or it will give an error message and will stop. BASIC is usually good about pointing out mistakes and telling the user which line is not working. If there is an error, you can list the line and figure out what is wrong.

BASIC encourages experiments. You can stop the program, change part of it, and see the results immediately. Like a sculptor molding a lamp of clay a weekend programmer can be creative—adding a line here, changing a variable there. When you are creating a graphics screen or playing with sound effects, BASIC's flexibility makes it easy for you to test new ideas.

Since BASIC is a high-level language with English keywords, program listings are understandable. You easily read through a subroutine and follow its logic.

People who dislike BASIC generally offer one of two arguments against it. First, BASIC is an unstructured lan-

guage (as it imposes few rules on the programmer), and programs often have so many Go To's that reading the listing is like untangling spaghetti. Second, compared to those written in other languages, BASIC programs run slowly.

Those who are admirers of structured programming suggest that programs should be broken into modules of less than one page each. Variables should be declared at the beginning of each module. Loops should be indented. You should include many comments that clarify what is going on. One should not use an unconditional Go To.

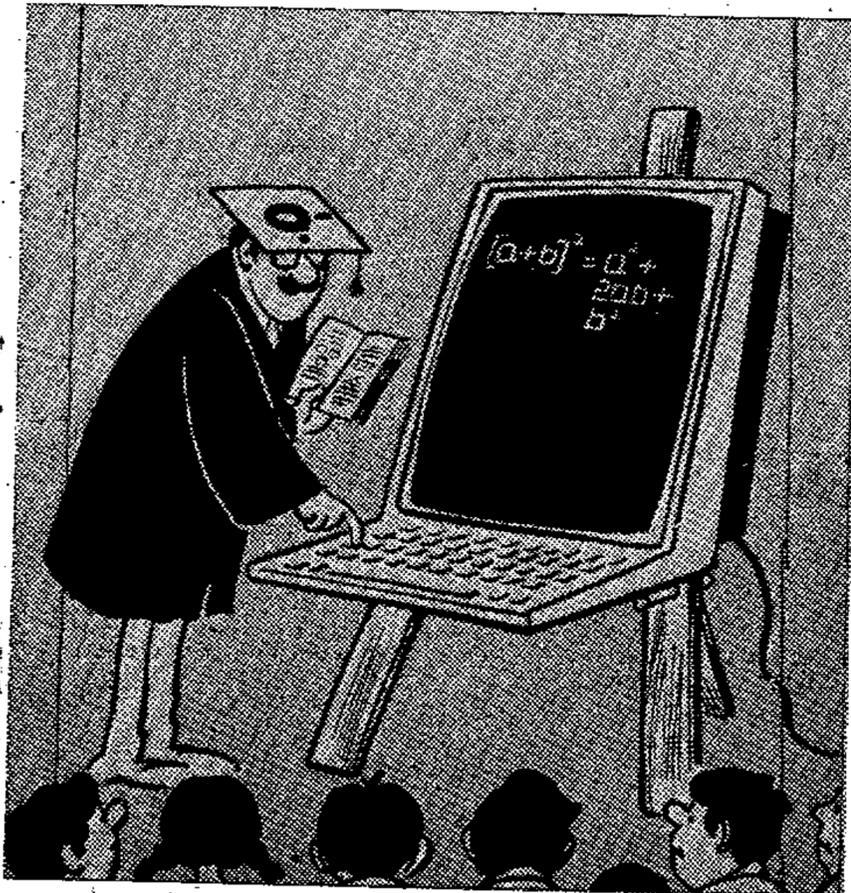
If you agree that there are advantages to structured programming, you can easily follow all of those rules in BASIC. The modules are subroutines. Variables can be defined at the start of a program.

FOR NEXT loops can be indented, you can include RBMs and avoid the Go To command. You can write highly structured programs, if that is what you want. In other words, BASIC does not force you to write spaghetti code. It is possible to create a program that looks nice when it is listed. If you see a program that looks messy—think that the fault is with the author—not the language.

On the other hand, you could ignore the whole idea of structure. If a program works, it works. Some very good programs do not look clean and structured on the inside, but they get the job done.

Now someone may be interested to know the speed of BASIC. If flat-out speed is what you want, then machine language is the only choice. All languages are slower than the machine languages. It is true that some languages are faster than BASIC. But that does not matter in some situations. For example, BASIC might take three seconds, versus one-third second in a faster language.

(To be continued)



or in program on the system disk, but whatever form it takes it is there. BASIC is the lingua franca, the universal language, for all types of microcomputers.

Everybody has BASIC. You can write a program, save it on a disk, and give a copy to friend or put it up on a local bulletin board system. Maga-

new computers with more memory or a faster processor, you'll have a head start on programming it if BASIC is known to you. Though there are some differences between the manifold dialects of BASIC but there's a core of commands that are the same on all computer. IF THEN, FOR-NEXT, PRINT, and many other key-