

Ask Popular

Ask Popular is a monthly column in which we answer general questions about small computers. Send your questions to: Ask Popular, POB 397, Hancock, NH 03449. (Due to the large number of letters received, we cannot answer each question with a personal letter.)

Q Which computer system is best for use by graphics professionals?

A We answered this question in April's Ask Popular column, but reader Andy Rosen submitted the following additional information on the subject.

The UV-1 graphic-arts system is marketed by Datamax Inc., 2252-B Landmeier Rd., Elk Grove Village, IL 60007. This Z80-based computer contains the necessary interfaces to output graphics images directly onto video tape or into a video monitor (NTSC standard color output). The minimal system costs \$7290. Unlike many computers that use contrived BASIC statements to control graphics, the UV-1 uses a language called Zgrass, which is designed for people involved with the graphic arts. The language does for graphics what a word processor does for words.

Q I've read many places (and I tell my students) that machine language looks like this:

00101010

10000001

00111100

and that assembly language looks like this:

LD HL,(3C81H)

But in many articles describing programs, authors seem to use the terms interchangeably. What's the correct usage? David Dow, Hardwick, VT

A With respect to the Z80 micro-processor, both forms of language listed above mean: "Load the HL register pair with the contents of

memory address 3C81 hexadecimal." Although the second form is easier for people to use, the first is required for computers to use.

When referring to the act of writing a machine-language program, we may call it "assembly-language programming" since few people program directly in machine language. But when referring to a completed, executable program, we say it is "a machine-language program." This is done because the computer can't execute the alphabetic symbols; it must have binary instructions.

Q Are there many computer programs for stock market analysis? Please list a few. David Jensen, Omaha, NE

A You're in luck. Here are a few we've uncovered. The list is not comprehensive, and no recommendations are intended.

Dowlog, \$99.95 from R. T. R. Software Inc. (1147 Baltimore Dr., El Paso, TX 79902): retrieves stock information from the Dow Jones Information Service and uses it to maintain a user-defined database. For the Apple II and II Plus.

Market Charter, \$129.95 from R. T. R. (see address above): aids in charting stocks. The user manually enters information into the database. For the Apple II and II Plus.

Portfolio Master, \$75 from Investors Software (POB 2605, San Francisco, CA 94126): generates six different reports about user-entered securities. For the Apple II and II Plus.

Stock Portfolio Management System, \$290 from Atlantic City Computer Corporation (19 Bryant Rd., Turnersville, NJ 08012): helps stockbrokers

maintain client portfolios. For the Apple II and II Plus, Commodore PET and CBM, and Radio Shack TRS-80 Models II and III.

Standard & Poor's Stockpak and Portfolio Management System, \$49.95 from Radio Shack dealers: maintains a portfolio of up to 100 securities and includes a 900-company database with monthly updates available on disk from Standard & Poor's Corporation. For the Radio Shack TRS-80 Models I and III.

Q I read an article about how the IRS could audit a person's tax records stored on disk. But what's to keep you from changing the information on the disks before turning them over? Is there a way to tell how recently information on a disk has been modified? Name withheld by request

A In the first place, the IRS is not likely to accept financial records on disk as definitive. They want paid receipts and other official records. But to answer your question directly, there is no way to tell how recently a disk has been modified—unless the software provides an audit trail putting a date on all transactions. The best accounting programs for business have this feature, but few if any home-finance programs keep track of who performed a transaction on the file or when it was done.

Q I'd like to interface my ham radio to my computer to be able to send code from the computer keyboard and have incoming messages displayed on the screen. I have an Apple II. Can you help? Bud Turner, Winslow, AZ

A Licensed amateur radio operators have been using computers to communicate via Morse and radio teletypewriter (RTTY) code for several years.

Here are two companies that supply