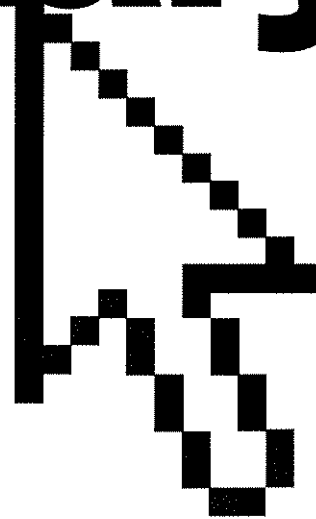


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Acquisitions Editor: Christey Bahn

Project Editor: Kim Fryer

program creation *n.* The process of producing an executable file. Traditionally, program creation comprises three steps: (1) compiling the high-level source code into assembly language source code; (2) assembling the assembly language source code into machine-code object files; and (3) linking the machine-code object files with various data files, run-time files, and library files into an executable file. Some compilers go directly from high-level source to machine-code object, and some integrated development environments compress all three steps into a single command. *See also* assembler, compiler (definition 2), linker, program.

program file *n.* A disk file that contains the executable portion(s) of a computer program. Depending on its size and complexity, an application or other program, such as an operating system, can be stored in several different files, each containing the instructions necessary for some part of the program's overall functioning. *Compare* document file.

program generator *n.* A program that creates other programs (usually in source code) based on a set of specifications and relationships given by the user. Program generators are often used to simplify the task of creating an application. *See also* 4GL, application generator.

program listing *n.* A copy, usually on paper, of the source code of a program. Some compilers can generate program listings with line numbers, cross-references, and so on.

program logic *n.* The logic behind the design and construction of a program—that is, the reasons it works the way it does. *See also* logic error.

programmable *adj.* Capable of accepting instructions for performing a task or an operation. Being programmable is a characteristic of computers.

programmable function key *n.* Any of several, sometimes unlabeled, keys on some third-party keyboards that allow the user to "play back" previously stored key combinations or sequences of keystrokes called *macros*. The same effect can be achieved with a standard keyboard and a keyboard enhancer, the latter of which intercepts the keyboard codes and substitutes modified values; but programmable function keys accomplish this without requiring RAM-resident software. *Compare* keyboard enhancer.

programmable interrupt controller *n.* An Intel chip that handles interrupt requests (IRQs). IBM AT ma-

chines use two programmable interrupt controllers to accommodate a maximum of 15 IRQs. The programmable interrupt controller has been replaced by the advanced programmable interrupt controller (APIC) which supports multiprocessing. *Acronym:* PIC. *See also* IBM AT, IRQ.

programmable logic array *n.* *See* field-programmable logic array.

programmable logic device *n.* A logic chip that is programmed by the customer rather than by the manufacturer. Like a gate array, a programmable logic device consists of a collection of logic gates; unlike a gate array, a programmable logic device need not have its programming completed as part of the manufacturing process. *Acronym:* PLD. *See also* logic chip. *Compare* gate array.

programmable read-only memory *n.* *See* PROM.

program maintenance *n.* The process of supporting, debugging, and upgrading a program in response to feedback from individual or corporate users or the marketplace in general.

programmatic interface *n.* **1.** A user interface dependent on user commands or on a special programming language, as contrasted with a graphical user interface. UNIX and MS-DOS have programmatic interfaces; the Macintosh and Windows have graphical user interfaces. *See also* command-line interface, graphical user interface, iconic interface. **2.** The set of functions any operating system makes available to a programmer developing an application. *See also* application programming interface.

Programmed Input/Output *n.* *See* PIO.

Programmed Inquiry, Learning or Teaching *n.* *See* PILOT.

programmer *n.* **1.** An individual who writes and debugs computer programs. Depending on the size of the project and the work environment, a programmer might work alone or as part of a team, be involved in part or all of the process from design through completion, or write all or a portion of the program. *See also* program. **2.** In hardware, a device used to program read-only memory chips. *See also* PROM, ROM (definition 2).

programmer's switch *n.* A pair of buttons on Macintosh computers that enable the user to reboot the system or to enter a command-line interface at a low level of the operating system. Originally, only