

IC: See **integrated circuit**.

immediate execution: The execution of a program statement as soon as it is typed. In BASIC, immediate execution occurs when the line is typed without a line number; immediate execution allows you to try out nearly every statement immediately to see how it works. Compare **deferred execution**.

implement: To put into practical effect, as to *implement* a plan. For example, a language translator implements a particular language.

IN#: This command designates the source of subsequent input characters. It can be used to designate a device in a slot or a machine-language routine as the source of input.

index: (1) A number used to identify a member of a list or table by its sequential position. (2) A list or table whose entries are identified by sequential position. (3) In machine-language programming, the variable component of an indexed address, contained in an index register and added to the base address to form the effective address.

indexed addressing: A method used in machine-language programming to specify memory addresses. See also **memory location**.

index register: A register in a computer processor that holds an index for use in indexed addressing. The 6502 microprocessor used in the Apple II family of computers has two index registers, called the **X register** and the **Y register**. The 68000 microprocessor used in Macintosh-family computers has 16 registers that can be used as index registers.

index variable: A variable whose value changes on each pass through a loop. Often called control variable or *loop variable*.

infinite loop: A section of a program that will repeat the same sequence of actions indefinitely.

initialize: (1) To set to an initial state or value in preparation for some computation. (2) To prepare a blank disk to receive information by organizing its surface into tracks and sectors; same as **format**.

initialized disk: A disk that has been organized into tracks and sectors by the computer and is therefore ready to store information.

input: Information transferred into a computer from some external source, such as the keyboard, a disk drive, or a modem.

input/output (I/O): The process by which information is transferred between the computer's memory and its keyboard or peripheral devices.

input routine: A machine-language routine; the standard input routine reads characters from the keyboard. A different input routine might, for example, read them from an external terminal.

instruction: A unit of a machine-language or assembly-language program corresponding to a single action for the computer's processor to perform.

integer: A whole number in fixed-point form. Compare **real number**.

Integer BASIC: A version of the BASIC programming language used by the Apple II family of computers. Integer BASIC is older than Applesoft BASIC and is capable of processing numbers in integer (fixed-point) form only. Many games are written in Integer BASIC because its instructions can be executed very quickly. Compare **Applesoft BASIC**.

integrated circuit: An electronic circuit—including components and interconnections—entirely contained in a single piece of semiconducting material, usually silicon. Often referred to as an *IC* or a *chip*.