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- **odd header** In word processing, a *header* that appears on odd-numbered pages.
- **OEM** Abbreviation of **original equipment manufacturer**. The company that actually manufactures a piece of computer equipment, which is then modified or repackaged and sold to the consumer. The term is often applied to value-added resellers (VARs), who purchase separate components in bulk from large manufacturers and package them as complete computer systems. Although technically not OEMs, these VARs are the first to create a working computer out of separate parts and therefore they are sometimes considered to be entitled to the designation.

off-line Not connected to a computer or computer network.

- offset 1. A value that specifies the distance of an address from a reference point known as the base address. If A is the address 100, then A + 7, where 7 is the offset, specifies the address 107.
 2. See gutter.
- [oh-LAY] Acronym for Object Linking and Embedding. OLE A Microsoft Windows technology for linking documents and establishing how updates to the data of one document affect the data in other documents. Whether linked or embedded, one document appears to be part of another; for example, a graph may be placed in a spreadsheet, which in turn may be part of a word processing document. Sound and video may also be embedded. Linked documents are stored in separate files but updates in one are automatically reflected in the other. The data for an embedded document is actually stored in the same file as the enclosing document and is not identifiable as a separate entity. In either case, the applications responsible for editing all the different pieces cooperate to make it easy to move among them and unnecessary to start each explicitly. See also hot link.

on-board modem See internal modem.

on-line Connected to or accessible by means of a computer or computer network.

printout

printout Printed output of text or data; hard copy.

Print Screen key Abbreviated **Prt Sc** A key on many IBM PC and compatible computer keyboards that when pressed sends whatever text and graphics are currently on the display screen to the printer. It works under *DOS* but may not be supported in all applications. It can be a handy feature. For example, you can list all the files in a *directory* on the screen with the DOS command DIR and then obtain a *hard copy* of the list by pressing the Print Screen key.

print server See server.

print spooler See spooler.

process *n*. **1.** A program. **2.** A part of a program that does a single task.

-v. To perform an operation, such as sorting or calculating, on data.

processor 1. See microprocessor. 2. See CPU.

program v. To write a set of instructions that a computer can execute.

-n. A set of instructions that a computer can execute. A program is a sequence of directions, called *statements*, that specify exactly what the computer needs to do to accomplish a predetermined task. A program is written in a programming language, a specially constructed vocabulary and set of rules for instructing a computer. Generally, one programs in a high-level language, such as Pascal, C, BASIC, or FORTRAN. Programs can also be written in assembly language, a low-level language one step removed from the machine language understood by the computer.

Programming instructions are often referred to as *code*. The program as written by the programmer is called the *source code*. A program that has been translated into machine language and is ready to run is known as an "executable pro-

gram" or "executable code." *Software* that you purchase consists of one or more executable programs.

program file A file that contains an *application* or program. A *data file* contains work created with an application or program.

programmable read-only memory See PROM.

programmer One who writes computer programs.

programming language An artificial *language* consisting of a vocabulary along with grammatical rules used to write a set of instructions that can be translated into *machine language* and then executed by a computer. Machine language is the language the computer actually understands. Each different type of *CPU* has its own unique machine language. English and other *natural languages* are not programming languages because they cannot be translated into machine language.

The term programming language usually refers to highlevel languages, such as FORTRAN, C, COBOL, Pascal, or BASIC. Lying below high-level languages are assembly languages, which are similar to machine languages. Programmers can also program in assembly languages.

Lying above high-level languages are *fourth-generation lan*guages, usually called 4GLs. 4GLs are the closest to natural languages.

Regardless of the language in which it's written, the program must be translated into machine language. This is done by either *compiling* the program or interpreting the program.

PROLOG [PRO-log] Acronym for **programming in logic.** A *high-level language* widely used for programming in the field of *artificial intelligence*, especially *expert systems*. It was developed in the early 1970s by Alain Colmerauer and Philippe Roussel. PROLOG works with the logical relationships between pieces of data rather than with their mathematical relationships. A program is constructed as a set of facts and a set of rules for deriving new facts.