
Dictionary of Computer and Internet Terms

Tenth Edition

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the command in an `if` statement, but in C, doing so is legal (and always comes out true if the value assigned is nonzero).

ignore list a list of users you have blocked in a chat or instant messaging program. When another user is on your ignore list, your software will ignore messages from them. *Synonyms:* BLACKLIST; KILL FILE.

IIOB (Internet Inter-ORB Protocol) a protocol that extends TCP/IP by adding CORBA defined messages for objects to connect to each other over the network. *See* CORBA; PROTOCOL.

IIRC online abbreviation for “if I remember correctly.”

IIS (Internet Information Services) the component of Microsoft Windows (professional and server editions only) that enables the computer to work as a web, FTP, and e-mail server.

i.LINK *see* FIREWIRE.

illegal operation an operation that a program is not permitted to perform, such as writing on a read-only disk or using memory allocated to some other program. Illegal operations are almost invariably the result of errors in programming.

IM Instant Message or Messenger; *see* AIM; LIVE MESSENGER.

iMac a line of Apple Macintosh computers with a distinctive streamlined design introduced in 1998. The current iMac computer is built entirely within its flat-screen monitor. *See also* APPLE; MACINTOSH.

image

1. a picture, represented in a computer's memory. *See* GRAPHICS.
2. a copy, on a disk, of the contents of a computer's memory. A BOOT DISK may contain an image in this sense, i.e., a large block of data that can be copied directly into memory.

image map a web page graphic to which multiple links have been assigned. It is possible to click on different parts of the picture and activate different links. For example, you might create a map of your community that appears on the web page; if the user clicks on the part of the map representing one neighborhood, then the browser will jump to a link providing information about that neighborhood. This gives the links a visual meaning that would not be there in a list of text-only links. Image maps can be created with some web-creation software programs, or they can be defined directly by hand-coding the proper HTML.

image processing the use of a computer to modify pictures (usually bitmap images). Applications of image processing include computer vision, enhancement of photographs, and creation of works of art. Many image processing functions are built into PAINT PROGRAMS as FILTERS (definition

1). For examples, *see* ADD NOISE; BLEND; BLUR; BRIGHTNESS; COLOR/GRAY MAP; EDGE DETECT; EQUALIZE; HISTOGRAM; MOTION BLUR; PIXELATE, PIXELIZE; REMOVE SPOTS; SHARPEN; UNSHARP MASKING. *See also* COLOR; COMPUTER; CONVOLUTION; DEBLURRING; RETOUCHING; VISION.

imagesetter a high-quality output device. Imagesetters can deliver up to 2400 DPI (dots per inch) instead of the 300 to 1200 DPI of ordinary laser printers.

IMAP (Internet Mail Access Protocol) a protocol for viewing e-mail on a personal computer while leaving it in place on the host system. *Contrast* POP, which delivers the mail and deletes it from the server. *See* PROTOCOL.

IMG tag used in HTML to indicate an image file. For example, *see* HTML.

IMHO online abbreviation for "in my humble opinion."

IMO online abbreviation for "in my opinion."

impact printer a printer that prints on paper by impacting a cloth ribbon coated with ink, thus transferring ink to the paper. Dot-matrix printers are the most common type of impact printer. Today, impact printers are used mainly for business forms that involve carbon paper or carbonless copy paper. *See* DOT-MATRIX PRINTER; LINE PRINTER; PICKUP ROLLER.

impedance a measure of how easily an alternating current can pass through an electrical circuit. The impedance of a resistor is the same as its resistance. Capacitors and inductors also affect impedance, depending on the frequency of the current. The impedance of a capacitor decreases as the frequency increases; the impedance of an inductor increases as the frequency increases. The characteristic impedance of coaxial cable results from the interaction of its inductance and capacitance. It is not a resistance and cannot be measured with an ohmmeter. *See* COAXIAL CABLE.

import to load a file from a format other than the application program's native format. Many word processing and graphics programs have the ability to import text and graphics from several different file formats. Because importing is a type of file conversion, formatting and image detail may be lost in the process. *See* CONVERSION PROGRAM.

in the loop (*jargon*) involved in decision-making or control, like an automatic control system that uses feedback. *See* LOOP (definition 2).

incremental backup a backup operation that only copies files that have changed since the last backup. *See* BACKUP COPY.

incremental compiler a compiler that compiles the lines of a program as they are typed into the computer, rather than compiling the whole program at once. The purpose is to keep the programmer from having to wait a long time for the complete program to be compiled when it is finished. *See* COMPILER.

(linear) or have the blend radiate from a central point (radial). *See also* FOUNTAIN FILL; UNIFORM FILL.

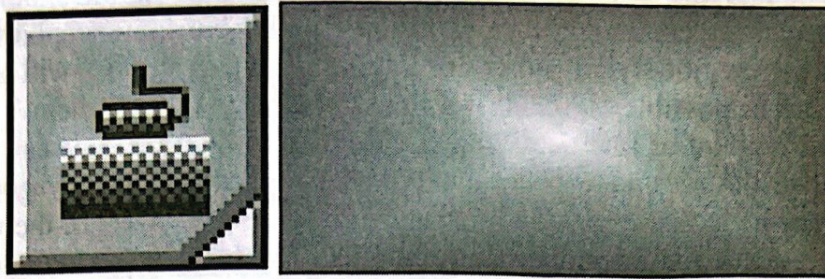


FIGURE 120. Gradient fill tool (from Adobe PhotoShop)

grammar checker a part of a word processing program that flags sentences that violate rules of grammar. For example, in Microsoft Word, if you type "They is happy," the word "is" will be marked with a wavy green underline to indicate that it is not grammatical. However, grammar checkers cannot always be relied on to identify proper usage for your particular document.

See also SPELL CHECKER.

grandfather tape a tape that is two generations older than the current data; for example, a backup tape from two days ago if backups are done daily. *See also* HARD DISK MANAGEMENT.

graph

1. a graphical display of information, designed to make it easier for the reader to interpret and understand numerical data. *See* BAR GRAPH and PIE CHART for examples.

2. in mathematics, a set of points connected together in a specific way. *See* TOPOLOGY.

graphical user interface (GUI) a way of communicating with the computer by manipulating icons (pictures) and windows with a mouse. Before GUIs became widespread, it was common for computers to operate in a mode where only text (no graphics) could be displayed on the screen.

Xerox developed a machine with a graphical user interface in the 1970s, but the first widely used GUI machine was the Apple Macintosh in 1984. The release of Microsoft Windows 3.0 in 1990 led to widespread use of a graphical user interface on IBM PC-compatible computers. For examples, *see* MACINTOSH; WINDOWS.

graphics the use of computer output devices, such as screens, printers, and plotters, to produce pictures. The applications of computer graphics include publishing, education, entertainment, and the visualization of computed data (e.g., graphs of mathematical functions).

There are two basic ways to tell a computer how to draw a picture. In *vector graphics*, the computer is told to put a real or imaginary pen in a particular position and then draw a line a certain distance in a certain direction (or draw a line to another specific point). The alternative is

raster graphics or *bitmap graphics*, in which the screen or plotting area is divided into a rectangular array of points (called *pixels*, from “picture cells”), and the computer is told what color each point should be. Computer screens and printers are raster devices, but some graphics software uses vector-style instructions internally so that all lines will appear as sharp as possible on the device actually used to display them.

The amount of fine detail that a particular graphics device can show is called the *resolution*. The resolution of a printer is usually given in dots per inch; the resolution of a screen is given as the size of the whole image. A good laser printer can print 1200 dots (pixels) per inch, so that an 8 × 10-inch picture is a 9600 × 12,000 array of pixels and contains far more detail than the screen can display.

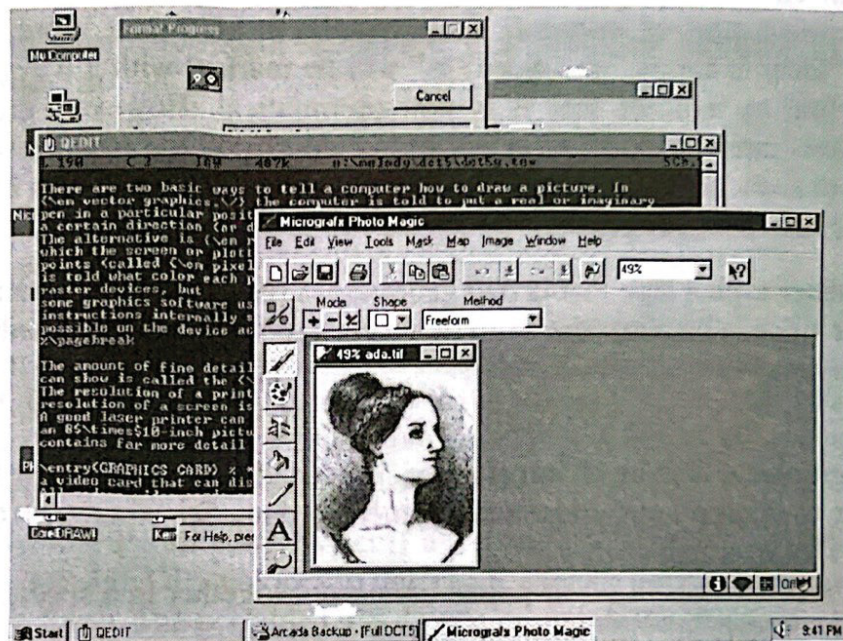


FIGURE 121. Graphical user interface (Windows)

graphics card a video card that can display graphics as well as text. All modern video cards are graphics cards. *See* SVGA; VGA.

graphics tablet an alternative to a mouse. A graphics tablet consists of a pressure-sensitive pad on which you draw with a special pen called a *STYLUS*. This is much more natural than attempting to draw with a mouse. *See* DRAW PROGRAM; PAINT PROGRAM.

grayed displayed in gray type and not available for selection. If a menu option appears in light gray rather than black type, it cannot be chosen (*see* Figure 78 on page 140). Menu selections are grayed whenever it is impossible to do the thing they call for (e.g., “Save” may be grayed if there is no data to be saved). *See* DIMMED.

graylist a spam filtering method in which message delivery is delayed for senders not on the *WHITELIST* or *BLACKLIST*. The message is delivered if it is re-sent (in the hope that spammers won’t re-send and legitimate senders will).