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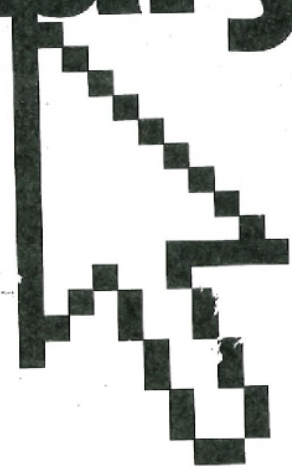
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exabyte \eks'ā-bit\ *n.* Roughly 1 quintillion bytes, or a billion billion bytes, or 1,152,921,504,606,846,976 bytes. *Abbreviation:* EB.

exception *n.* In programming, a problem or change in conditions that causes the microprocessor to stop what it is doing and handle the situation in a separate routine. An exception is similar to an interrupt; both refer the microprocessor to a separate set of instructions. *See also* interrupt.

exception handling *n.* *See* error handling.

exchangeable disk *n.* *See* removable disk.

exchange sort *n.* *See* bubble sort.

Excite *n.* A World Wide Web search engine developed by Excite, Inc. After conducting a search, Excite provides both a summary of each matching Web site it has located and a link to more information of the same type.

exclusive NOR *n.* A two-state digital electronic circuit in which the output is driven high only if the inputs are all high or all low.

exclusive OR *n.* A Boolean operation that yields "true" if and only if one of its operands is true and the other is false. *See the table. Acronym:* EOR. *Also called* XOR. *See also* Boolean operator, truth table. *Compare* AND, OR.

Table E.1 Exclusive OR

a	b	a XOR b
0	0	0
0	1	1
1	0	1
1	1	0

.exe *n.* In MS-DOS, a filename extension that indicates that a file is an executable program. To run an executable program, the user types the filename with the .exe extension at the prompt and presses Enter. *See also* executable program.

executable *adj.* Of, pertaining to, or being a program file that can be run. Executable files have extensions such as .bat, .com, and .exe.

executable *n.* A program file that can be run, such as file0.bat, file1.exe, or file2.com.

executable program *n.* A program that can be run. The term usually applies to a compiled program translated into machine code in a format that can be loaded into memory and run by a computer's processor. In interpreter languages, an executable program

can be source code in the proper format. *See also* code (definition 1), compiler (definition 2), computer program, interpreter, source code.

execute *vb.* To perform an instruction. In programming, execution implies loading the machine code of the program into memory and then performing the instructions.

execution time *n.* The time, measured in clock ticks (pulses of a computer's internal timer), required by a microprocessor to decode and carry out an instruction after it is fetched from memory. *Also called* E-time. *See also* instruction time.

executive *n.* *See* operating system.

executive information system *n.* A set of tools designed to organize information into categories and reports. Because it emphasizes information, an executive information system differs from a decision support system (DSS), which is designed for analysis and decision making. *Acronym:* EIS. *Compare* decision support system.

exerciser *n.* A program that exercises a piece of hardware or software by running it through a large set of operations.

exit *vb.* In a program, to move from the called routine back to the calling routine. A routine can have more than one exit point, thus allowing termination based on various conditions.

expanded *adj.* A font style that sets characters farther apart than the normal spacing. *Compare* condensed.

expanded memory *n.* A type of memory, up to 8 MB, that can be added to IBM PCs. Its use is defined by the Expanded Memory Specification (EMS). Expanded memory is not accessible to programs in MS-DOS, so the Expanded Memory Manager (EMM) maps pages (blocks) of bytes from expanded memory into page frames in accessible memory areas. Expanded memory is not needed in Windows 9x, all versions of Windows NT, and Windows 2000. *See also* EEMS, EMS, Expanded Memory Manager, page frame.

Expanded Memory Manager *n.* A driver that implements the software portion of the Expanded Memory Specification (EMS) to make expanded memory in IBM and compatible PCs accessible. *Acronym:* EMM. *See also* EMS, expanded memory, extended memory.

Expanded Memory Specification *n.* *See* EMS.

expansion *n.* A way of increasing a computer's capabilities by adding hardware that performs tasks that

E

and encased in a rigid plastic shell equipped with a sliding metal cover. On the Macintosh, a single-sided microfloppy disk can hold 400 kilobytes (KB); a double-sided (standard) disk can hold 800 KB; and a double-sided high-density disk can hold 1.44 megabytes (MB). On IBM and compatible machines, a microfloppy can hold either 720 KB or 1.44 MB of information. *See also* floppy disk.

microform *n.* The medium, such as microfilm or microfiche, on which a photographically reduced image, called a *microimage*, is stored. A microimage usually represents text, such as archived documents. *See also* microfiche, microfilm.

micrographics *n.* The techniques and methods for recording data on microfilm. *See also* microform.

microimage *n.* A photographically reduced image, usually stored on microfilm or microfiche, that is too small to be read without magnification. *See also* microform, micrographics.

microinstruction *n.* An instruction that is part of the microcode. *See also* microcode.

microjustification *n.* *See* microspace justification.

microkernel *n.* 1. In programming, the strictly hardware-dependent part of an operating system that is intended to be portable from one type of computer to another. The microkernel provides a hardware-independent interface to the rest of the operating system, so only the microkernel needs to be rewritten to port the operating system to a different platform. *See also* kernel, operating system. 2. A kernel that has been designed with only the basic features and typically in a modular fashion.

micrologic *n.* A set of instructions, stored in binary form, or a set of electronic logic circuits that defines and governs the operation within a microprocessor.

microminiature *n.* An extremely small circuit or other electronic component, especially one that is a refinement of an already miniaturized element.

microphone *n.* 1. A device that converts sound waves into analog electrical signals. Additional hardware can convert the microphone's output into digital data that a computer can process; for example, to record multimedia documents or analyze the sound signal. 2. A communications program that runs on the Macintosh computer.

microprocessor *n.* A central processing unit (CPU) on a single chip. A modern microprocessor can have

several million transistors in an integrated-circuit package that can easily fit into the palm of one's hand. Microprocessors are at the heart of all personal computers. When memory and power are added to a microprocessor, all the pieces, excluding peripherals, required for a computer are present. The most popular lines of microprocessors today are the 680x0 family from Motorola, which powers the Apple Macintosh line, and the 80x86 family from Intel, which is at the core of all IBM PC-compatible computers. *See also* 6502, 65816, 6800, 68000, 68020, 68030, 68040, 80286, 80386DX, 80386SX, 8080, 8086, 8088, 88000, DECchip 21064, i486DX, i486DX2, i486SL, i486SX, Pentium, PowerPC, SPARC, Z80.

microprogramming *n.* The writing of microcode for a processor. Some systems, chiefly minicomputers and mainframes, allow modification of microcode for an installed processor. *See also* microcode.

microsecond *n.* Abbreviated μ s. One millionth (10^{-6}) of a second.

Microsoft DOS *n.* *See* MS-DOS.

Microsoft Foundation Classes *n.* A C++ class library developed by Microsoft. The Microsoft Foundation Class library, or MFC, provides the framework and classes that make it easier and faster for programmers to build Windows applications. MFC supports ActiveX and is bundled with several C++ compilers, including Microsoft Visual C++, Borland C++, and Symantec C++. Acronym: MFC. *See also* ActiveX, C++. *Compare* Application Foundation Classes.

Microsoft Internet Explorer *n.* *See* Internet Explorer.

Microsoft Network *n.* *See* MSN.

Microsoft Windows *n.* *See* Windows.

Microsoft Windows 2000 *n.* *See* Windows 2000.

Microsoft Windows 95 *n.* *See* Windows 95.

Microsoft Windows 98 *n.* *See* Windows 98.

Microsoft Windows CE *n.* *See* Windows CE.

Microsoft Windows NT *n.* *See* Windows NT.

microspace justification *n.* The addition of thin spaces between characters within words to fill out a line for justification, instead of relying only on adding space between words. Good microspace justification gives justified text a more polished, professional look; excessive microspace justification causes words to lose visual coherence. *Also called* microjustification. *See also* justify (definition 2), microspacing.

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