ГЛОСАРІЙ ТА АНГЛО-УКРАЇНСЬКИЙ СЛОВНИК ТЕХНІЧНИХ ТЕРМІНІВ З КОМП'ЮТЕРНОЇ ТЕХНІКИ

Міністерство освіти і науки України
Вінницький національний технічний університет

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Вінниця ВНТУ 2006

Рецензенти:

Рекомендовано до видання Вченою радою Вінницького національного технічного університету Міністерства освіти і науки України

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INTRODUCTION

The development of international relations has become reality of international relations has become reality nowadays. Those, who want to prosper, cannot do without English.

One of the major problems students face in non-English speaking country is an enormous quantity of information they can find in specialized magazines, newspapers, and Internet, and the difficulty of understanding this information without knowledge of the specialized terms in this or that field.

This book consists of the "Glossary of Computer Terms", English-Ukrainian vocabulary.

The English-Ukrainian vocabulary of computer terms helps understand and translate the terms which are necessary when dealing with computers, reading and translating newspapers, magazines, books about computers and programming, developing the projects, conducting a research work, etc.

The glossary of computer terms, on the one hand, contains the most of computer terms, on the other hand, gives explanations of the terms in English, if anybody doesn't understand them. It helps master computer terms. The glossary of computer terms is an integral part of the course "Terminology". There are references to this glossary in every chapter of this textbook.

The book may be useful for those studying computer sciences, computer engineering, computer technologies, programming, etc., and just for those dealing with computers.

GLOSSARY OF COMPUTER TERMS

Algorithm A set of well-defined instructions for the solution of a problem in a finite number of steps.

4-bit binary coded decimal (BCD) A computer code that uses 4-bit groupings to represent digits in decimal numbers.

6-bit binary coded decimal A data representation scheme that is used to represent the decimal digits 0 through 9, the letters A through Z, and 28 special characters.

Access mechanism The physical device that positions the read/write head of a direct-access device over a particular track.

Accounting machine Mechanically operated forerunner of the computer; could read data from punched cards, perform calculations, rearrange data, and print results in varied formats.

Acoustic coupler modem A device used in telecommunications that is attached to a computer by a cable and that connects to a telephone when a standard contoured telephone receiver is placed on two rubber cups that are built into the device.

Activity The proportion of records processed during an update run.

Address A unique identifier assigned to each memory location within primary storage.

American Standard Code for Information Interchange (ASCII) A 7-bit standard code used for information interchange among data-processing systems, communication systems, and associated equipment.

Analog computer A computer that measures continuous electrical or physical conditions rather than operating on digits; contrast with digital computer.

Analog transmission Transmission of data over communication channels in a continuous wave form.

Analytical engine Machine designed by Charles Babbage, capable of addition, subtraction, multiplication, division, and storage of intermediate results in a memory unit; too advanced for its time, the analytical engine was forgotten for nearly one hundred years.

APL (A Programming Language) A terminal-oriented, symbolic programming language especially suitable for interactive problem solving.

Application program   A sequence of instructions written to solve a specific user problem.

Arithmetic/logic unit (ALU)   The section of the processor or CPU that handles arithmetic computations and logical operations.

Artificial intelligence (AI)   Field of research currently developing techniques whereby computers can be used to solve problems that appear to require imagination, intuition, or intelligence.

ASCII-8 An 8-bit version of ASCII developed for computers that require 8-bit, rather than 7-bit codes.

Assembler program   Translator program for an assembly language program; produces a machine language program (object program); also called assembler.

Assembly language Lower-level, symbolic programming language that uses abbreviations rather than groupings of Os and Is.

Atanasoff-Berry Computer (ABC)   First electronic digital computer; developed by John Vincent Atanasoff and Clifford Berry.

Automatic data processing (ADP)   The collection, manipulation, and dissemination of data by electromechanical machines to attain specified objectives.

Automatic teller machine (ATM)   Remote terminal that allows bank customers to make transactions with the bank's central computer; user can check account balances, transfer funds, make deposits, withdrawals, and loan payments.

Back-end processor   A small CPU serving as an interface between a large CPU and a large data base stored on a direct-access storage device.

Bandwidth Also known as grade; the range, or width, of the frequencies available for transmission on a given channel.

Bar-code reader   A device used to read a bar code by means of reflected light, such as a scanner that reads the Universal Product Code on supermarket products.

BASIC (Beginners' AH-purpose Symbolic Instruction Code) A high-level programming language commonly used for interactive problem solving by users who may not be professional programmers.

Batch file access   An access method in which all transactions are accumulated for a given period of time and then processed all at once.

Batch processing   A method of processing data in which data items are collected and forwarded to the computer in a group.

Baud   A unit used to measure transmission speeds.

Binary number system Number system used in computer operations that uses the digits 0 and 1 and has a base of 2; corresponds to the two possible states in machine circuitry-"on" and "off."

Binary representation   Use of a two-state, or binary, system to represent data; as in setting and resetting the electrical state of semiconductor memory to either 0 or 1.

Biochip   In theory, a chip whose circuits will be built from the proteins and enzymes of living matter such as *E. coli* bacteria.

Bit (short for Binary digiT) The smallest unit of information that can be represented in binary notation.

Bit cells   The name for storage locations in semiconductors.

Blocks   Also called blocked records; records grouped on magnetic tape or magnetic disk to reduce the number of interrecord gaps and more fully utilize the storage medium.

Branch   Program logic used to bypass or alter the normal flow of execution.

Broad-band channels   Communication channels that can transmit data at rates of up to 120,000 bits per second; for example, laser beams and microwaves.

Bubble memory   A memory medium in which data is represented by magnetized spots (magnetic domains) resting on a thin film of semiconductor material.

Bundled   A way of selling computers in which the price includes training, maintenance costs, software, and other related products and services.

Bus configuration   A local area network (LAN) in which multiple stations connected to a communication cable can communicate directly with any other station on the line.

Byte   A fixed number of adjacent bits operated on as a unit.

C   A programming language that approaches assembly language in the efficiency of its object code, yet offers some of the same features of high-level language; sometimes referred to as a middle-level language.

Cache memory   Also known as a high-speed buffer; a working buffer or temporary area used in primary storage to help speed the execution of a program.

Calculate   To manipulate data by arithmetic or logical processes.

Capacitor   The device that holds the electrical charge within a bit cell of semiconductor memory.

Cathode ray tube (CRT) A visual display device that receives electrical impulses and translates them into a picture on a televisionlike screen.

Cell The unique location within an electronic spreadsheet where a row and a column intersect.

Central processing unit (CPU)   Acts as the "brain" of the computer; composed of three sections—arithmetic/logic unit (ALU), control unit and primary storage unit.

Centralized design   An information structure in which a separate data-processing department is used to provide data-processing facilities for the entire organization.

Chain   The logical path linking records according to one common field.

Chain printer   An output device that has the character set engraved in type and assembled in a chain that revolves horizontally past all print positions; prints when a print hammer (one for each column of the paper) presses the paper against an inked ribbon that presses against the characters on the print chain.

Charge-coupled device (CCD)   A storage device made of silicon; nearly 100 times faster than bubble memory devices.

Check digit   An additional bit determined by performance of some calculation on the code; used to catch input errors.

Chief programmer team (CPT)   A method of organization and evaluation used in managing system projects by which a chief programmer supervises the programming and testing of program modules; programmer productivity and program reliability are increased.

Classify   To categorize data according to certain characteristics so that they are meaningful to the user.

Clock speed   The number of electronic pulses a microprocessor can produce each second.

COBOL (COmmon Business-Oriented Language)   A high-level programming language generally used for accounting and business data processing.

Code   To translate data into machine-readable form so they can be entered into the computer system.

Collect   To gather data from various sources and assemble them at one location.

Command area   The area at the bottom of some electronic spreadsheets that displays the available commands to the user.

Commercial data base   A collection of information accessible over communication lines to paying subscribers; also called information service and information utility.

Communicate   To transfer information in intelligible form to a user.

Communication channel   A medium for carrying data from one location to another.

Communication software   Programs that assist in the transfer of data across communication channels by "tricking" a computer into acting as if a microcomputer terminal is part of that system; also called terminal software.

Compatibility   The ability to use equipment or software produced by one manufacturer on a computer produced by another manufacturer.

Compatible   Descriptive of hardware and/or software that can work together.

Compiler program   Translator program for a high-level language such as FORTRAN or COBOL; translates source-program statements into machine-executable code; also called compiler.

Computer   General-purpose electronic machine with applications limited only by the creativity of the humans who use it; its power is derived from its speed, accuracy, and memory.

Computer crime   Criminal act that poses a threat to those who use computers or is accomplished by using a computer.

Computer ethics   Term referring to the standard of moral conduct in computer use; way in which the spirit of the law is applied to computer-related activities.

Computer literacy   General knowledge about computers; includes some technical knowledge about hardware and software, the ability to use computers to solve problems, and awareness of how computers affect society.

Computer output microfilm (COM)   Miniature digitized photographic images of output placed on magnetic tape, which serves as input to a microfilm processor.

Computer security   The technical and administrative safeguards required to protect a computer-based system against physical and nonphysical hazards.

Computer store   A retail store that sells microcomputers and is structured to meet the needs of small business and personal computer owners.

Computer-aided design (CAD)   Process of designing, drafting, and analyzing a prospective product using computer graphics on a video terminal.

Computer-aided manufacturing (CAM)   Use of a computer to simulate or monitor the steps of a manufacturing process.

Computer-assisted instruction (CAI)   Use of a computer to instruct or drill a student on an individual or small-group basis.

Computerized axial topography (CT or CAT scanning)   Form of noninvasive physical testing that combines X-ray techniques and computers to aid diagnosis.

Concentrator   A device that systematically allocates the use of communication channels among several terminals.

Control program   A routine, usually part of an operating system, that helps control the operations and management of a computer system.

Control unit   The section of the CPU that directs the sequence of operations by electrical signals and governs the actions of the various units that make up the computer.

Convert   To translate information into a form people can read.

Coprocessor   A microprocessor that can be plugged into a microcomputer to replace or work with the microcomputer's original microprocessor.

Counter   A value in a program that indicates the number of times a loop is to be executed; the value is tested each time the loop is executed and when the stated value is reached, the loop is terminated.

Crash conversion   Also known as direct conversion; a system implementation approach in which the old system is completely abandoned and the new one implemented at once.

Cursor   A flashing character on a computer display screen that shows where the next typed character will appear.

Daisy-wheel printer   An output device resembling an office typewriter; it employs a flat disk with petal-like projections with characters on the surfaces; printing occurs one character at a time.

Data   Facts; the raw material of information.

Data base   Collection of data that are commonly defined and consistently organized to fit the information needs of a wide variety of users in an organization.

Data communication   The electronic transmission of data from one site to another usually over communication channels such as telephone/telegraph lines or microwaves.

Data processing   A systematic set of procedures for collecting, manipulating, and disseminating data to achieve specified objectives.

Data structures   The relationships between the data elements in a computer file.

Data-base analyst   The person responsible for the analysis, design, and implementation of the date base.

Data-base management system (DBMS)   A set of programs that serves as the interface between the data base and the programmer, operating system, and users.

Data manager/data-management package   An application software package that computerizes the everyday tasks of recording and filing information.

Decimal number system   A number system based on the powers of 10.

Demodulation   The process of retrieving data from a modulated carrier wave.

Difference engine   Machine designed by Charles Babbage in 1822 to compute mathematical tables with results up to five significant digits in length (In Babbage's time, the word *engine* meant invention).

Digital computer   Type of computer commonly used in business applications; operates on distinct data (for example, digits) by performing arithmetic and logic processes on specific data units.

Digital transmission   The transmission of data as distinct "on"/"off" pulses.

Direct-connect modem   A device used in telecommunications that is attached to a computer by a cable and which connects directly to a telephone line by plugging into a standard phone jack.

Distributed data processing (DDP) system   A system in which data processing is done at a site other than that of the central computer.

Decentralized design   An information structure in which the authority and responsibility for computer support are placed in relatively autonomous organizational operating units.

Decision logic table (DLT)   A table that depicts the logic used to arrive at a particular decision given a certain set of circumstances.

Decision support system (DSS)   An information system that provides information used to support unstructured managerial decision making.

Distributed data processing (DDP) system   A system in which data processing is done at a site other than that of the central computer.

Dedicated word-processing system   A computer system designed solely for word processing.

Deletion   A feature of a program that allows removal of characters, data, words, sentences, or blocks of text.

Distributed design   An information structure in which independent operating units have some data-processing facilities but there is still central control and coordination of computer resources.

Debugging   The process of locating, isolating, and resolving errors within a program.

Document-oriented word processor   A word processor that treats a text file as a single document, rather than as a series of pages.

Desk-checking   A method used in both system and application program debugging in which the sequence of operations is mentally traced to verify the correctness of the processing logic.

Detail diagram   Diagram used in HIPO to describe the specific function performed and data items used in a module.

Direct access   Method of processing in which data are submitted to the computer as they occur, and located, retrieved, and updated without reading all preceding data.

Direct access storage   A method of storing data whereby the data can be retrieved in any order, at random.

Direct-access file design   Records are organized in a file in any order, with record keys providing the only way to access data.

Direct-access storage device (DASD)   Auxiliary storage device that allows data to be stored and accessed either randomly or sequentially.

Directory   Contains record keys and their corresponding addresses; used to obtain the address of a record with a direct-access file design.

Disk address   The method used to uniquely identify a data record on a magnetic disk; consists of the disk surface number, the track number, and the record number.

Disk drive   The mechanical device used to rotate a disk pack during data transmission; speeds can reach 3,600 revolutions per minute.

Disk pack   A stack of magnetic disks.

Dot-matrix printer   A type of impact printer that creates characters through the use of dot-matrix patterns; also called wire-matrix printer.

Drum printer   An output device consisting of a metal cylinder that contains rows of characters engraved across its surface; one line of print is produced with each rotation of the drum.

Dumb terminal   A terminal that cannot be programmed.

Dummy module   A temporary program module inserted at a lower level to facilitate testing of the higher-level modules; used in top-down design to enable higher-level program modules to be coded prior to completion of lower-level modules.

Downtime   The time a system is not working because of equipment problems.

Electronic mail   Transmission of messages at high speeds over telecommunication facilities.

Electronic spreadsheet   An electronic ledger sheet used to store and manipulate any type of numerical data.

ED VAC (Electronic Discrete Variable Automatic Computer)   A stored-program computer developed at the University of Pennsylvania.

EDSAC (Electronic Delay Storage Automatic Computer)   Developed in England; the first stored-program computer.

Electronic data processing (EDP)   Data processing performed largely by electronic equipment, such as computers, rather than by manual or mechanical methods.

Electronic funds transfer (EFT)   Cashless method of managing money; accounts involved in a transaction are adjusted by electronic communication between computers.

Electronic mail   Transmission of messages at high speeds over telecommunication facilities.

Electrostatic printer   A nonimpact printer in which electromagnetic impulses and heat are used to affix characters to paper.

Electrothermal printer   A nonimpact printer that uses special heat-sensitive paper; characters are formed when heated rods in a matrix touch the paper.

ENIAC (Electronic Numerical Integrator And Calculator)   First general-purpose electronic digital computer; developed by John W. Mauchly and J. Presper Eckert Jr. at the University of Pennsylvania.

EPROM (Erasable Programmable Read-Only Memory)   A form of read-only memory that can be erased and reprogrammed, but only by being submitted to a special process such as exposure to ultraviolet light.

Even parity   A method of coding in which an even number of 1 bits represent each character; used to detect errors.

Extended Binary Coded Decimal Interchange Code (EBCDIC)   An 8-bit code for character representation.

Expert system   Form of artificial intelligence software that imitates the same decision-making processes of experts on a specific field.

File handler   A data-management application package capable of operating on only one file at a time.

Front-end processor   A small CPU serving as an interface between a large CPU and peripheral devices.

Feedback   A check within a system to see whether predetermined goals are being met.

Field   A meaningful item of data, such as a social security number or a person's name.

File   A grouping of related records, such as all student records; sometimes referred to as a data set.

First-generation computers   Computers that used vacuum tubes; developed in the 1950s; much faster than earlier mechanical devices, but very slow in comparison to today's computer.

Fixed scanner   An input device used to scan and read source data in bar-code form or in human-readable form.

Fixed-length records   A record format in which a maximum number of character positions are assigned.

Flexible disk   A low-cost, random-access form of data storage made of plastic; a flexible magnetic disk currently made in 3 1/2, 5 1/4, and 8-inch diameter sizes; also called diskette or floppy disk.

Fourth-generation computers   Computers that use chips made by large-scale integration and offer significant price and performance improvements over earlier computers.

Family of computers   Mainframes of differing sizes built by the same manufacturer and having the same processor.

FORTH   A middle-level programming language that offers advantages of assembly language and high-level languages.

FORTRAN (FORmuIa TRANslator)   A high-level programming language used primarily for programming mathematical, scientific, or engineering operations.

Front-end processor   A small CPU serving as an interface between a large CPU and peripheral devices.

Flexibility   The degree to which a computer system can be adapted or tailored to the changing requirements of the user.

Flowchart   A graphic representation in which symbols represent the flow, operations, logic, data, and equipment of a program or system; a program flowchart illustrates the structure and sequence in a program and a system flowchart illustrates the components and the flow of data through an entire system; also called a block diagram or logic diagram.

Flowlines   The lines that connect flowchart symbols.

Fiber optics   A data transmission concept using laser pulses and cables made of tiny threads of glass that can transmit huge amounts of data at the speed of light.

Full-duplex   A type of communication channel through which data can be transmitted in both directions simultaneously.

Fully distributed network configuration   A network design in which every set of nodes in the network can communicate directly with every other set of nodes through a single communication link.

Feedback   A check within a system to see whether predetermined goals are being met.

Gallium arsenide chip   A chip made with gallium arsenide, a material that requires lower voltage, generates less heat, and operates much faster than computer chips made from silicon.

Garbage in-garbage out   Phrase illustrating the fact that the meaningfulness of computer output relies on the accuracy or relevancy of the data fed into the processor.

General-purpose computers Computers that can be used for a variety of purposes.

Graphic display device A visual display device that projects output in the form of graphs and line drawings and accepts input from a keyboard or light pen.

Graphics tablet A flat board-like object, that when drawn on, transfers the image to a computer screen.

Graphics software package Application software package designed to allow the user to display images on the display screen or printer.

Grid chart A chart used in system analysis to summarize the relationships between the components of a system.

Half-duplex A type of communication channel through which data can be transmitted in both directions, but in only one direction at a time.

Holler plating Placing the same word, phrase, or block of text in several documents.

Hierarchical design An information structure in which each level within an organization has necessary computer power; responsibility for control and coordination goes to the top level.

Hard copy Printed output.

Hardware Physical components that make up a computer system.

Hexadecimal number system A base 16 number system commonly used when printing the contents of primary storage to aid programmers in detecting errors.

Hierarchical data structure Also called tree structure; the data structure in which one primary data element may have numerous secondary data elements linked to it at lower levels.

High-level programming languages Englishlike coding schemes that are either procedure-, problem-, or user-oriented.

Hollerith code Method of data representation named for the man who invented it; delineates numbers, letters, and special characters by the placement of holes in 80-column punched cards.

Horizontal software integration The combining of two or more software applications into one package that can share data.

Hierarchical configuration　A network design for multiple CPUs, in which an organization's needs are divided into multiple levels that receive different levels of computer support.

HIPO (Hierarchy plus Input-Process-Output)　A documentation or design technique used to describe the inputs, processing, and outputs of program modules.

Interactive video　A multimedia learning concept that merges computer text, sound, and graphics by using a videodisk, videodisk player, microcomputer with monitor and disk drive, and computer software.

Interpreter program　High-level language translator that evaluates and translates a program one statement at a time; used extensively on microcomputer systems because it takes less primary storage than a compiler; also called interpreter.

Internal modem　A modem built into the internal circuitry of a computer; no external cables or connections are needed.

Insertion　A feature of a program that allows characters, words, sentences, or blocks of text to be inserted into a document.

Integrated software　Two or more application programs that work together to allow easy movement of data between the applications; they also use a common group of commands among all of the applications.

Input/output management system　A subsystem of the operating system that controls and coordinates the CPU while receiving input from channels, executing instructions of programs in storage, and regulating output.

Input　Data submitted to the computer for processing.

Impact printer　A printer that forms characters by physically striking a ribbon against paper.

Indexed-sequential file design　Records organized sequentially and also listed in an index; allows for both sequential and direct-access processing.

Information　Data that has been organized and processed so it is meaningful.

Ink-jet printer　A nonimpact printer that uses a stream of charged ink to form dot-matrix characters.

Instruction set　The fundamental logical and arithmetic procedures that the computer can perform, such as addition, subtraction, and comparison.

Integrated circuit　An electronic circuit etched on a small silicon chip less than 1/8-inch square, permitting much faster processing than with transistors and at a greatly reduced price.

Intelligent terminal   A terminal with an internal processor that can be programmed to perform specified functions, such as data editing, data conversion, and control of other terminals.

Interactive   Descriptive of computer languages that allow the programmer or program user to communicate directly with the computer in a conversational fashion.

Interactive processing   A data-processing method where the user enters input via a keyboard during processing.

Interblock gap (IBG)   A space on magnetic tape that facilitates processing; records are grouped together and then separated by interblock gaps.

Interrecord gap (IRG)   A space that separates records stored on magnetic tape; allows the tape drive to regain speed during processing.

Inverted list   A list that has an index for every field in a file.

Job-control language (JCL)   A language that serves as the communication link between the programmer and the computer operating system.

Job-control program   A control program that translates the job-control statements written by a programmer into machine-language instructions that can be executed by the computer.

Josephson junction   A primary storage unit that, when completed, will be housed in liquid helium to reduce the resistance to the flow of electricity that currently exists in semiconductor memory.

Key   The unique identifier or field of a record; used to sort records for processing or to locate specific records within a file.

Keypunch   A keyboard device that punches holes in a card to represent data.

Key-to-disk   Hardware designed to transfer data entered via a keyboard to magnetic (hard) disk.

Key-to-diskette   Hardware designed to transfer data entered via a keyboard to a floppy disk instead of the conventional (hard) disk.

Key-to-tape   Hardware designed to transfer data entered via a keyboard to magnetic tape.

K (kilobyte)   Symbol used to represent 1,024 (2^{10}) storage units (1024 bytes) when referring to a computer's main memory; often rounded to 1,000 bytes.

Language-translator program   Software that translates Englishlike programs written by programmers into machine-executable code.

Large-scale integration (LSI) Method by which circuits containing thousands of electronic components are densely packed on a single silicon chip.

Laser printer A type of nonimpact printer that combines laser beams and electrophotographic technology to form images on paper.

Laser storage system A secondary storage device using laser technology to encode data onto a metallic surface; most often used for mass storage.

Light pen A pen-shaped object with a photoelectric cell at its end; used to draw lines on a visual display screen.

Linked list A file using pointers to maintain the sequence of the records.

Links Transmission channels that connect nodes.

Loop Program logic that causes a series of instructions to be executed repeatedly as long as specified conditions remain constant.

Language-translator program Software that translates Englishlike programs written by programmers into machine-executable code.

Librarian program Software that manages the storage and use of library programs by maintaining a directory of programs in the system library and appropriate procedures for additions and deletions.

Library program A user-written or manufacturer-supplied program or subroutine that is frequently used in other programs to perform a specific function; it is written and stored on secondary storage and called into primary storage when needed.

Linkage editor A subprogram of the operating system that links the object program from the system residence device to primary storage.

LISP (LISt Processing) A high-level programming language commonly used in artificial intelligence research and in processing lists of elements.

Line editor A word processing feature that allows operation on only one line of text at a time.

Local-area network (LAN) A specialized network of computers that operates within a limited geographic area, such as a building or complex of buildings, with the stations being linked by cable.

Mainframe A type of large, full-scale computer capable of supporting many peripherals.

Minicomputer A type of computer with the components of a full-sized system but with smaller primary storage capacity.

Megahertz (MH$_Z$)   One million times per second; the unit of measurement for clock speed.

Machine language   The only set of instructions that a computer can execute directly; a code that designates the proper electrical states in the computer as combinations of Os and Is.

Magnetic core   Iron-alloy, doughnut-shaped ring about the size of a pinhead of which memory can be composed; an individual core can store one binary digit (its state is determined by the direction of an electrical current); the cores are strung on a grid of fine wires that carry the current.

Magnetic disk   A direct-access storage medium consisting of a metal platter coated on both sides with a magnetic recording material upon which data is stored in the form of magnetized spots.

Magnetic domain   A magnetized spot representing data in bubble memory.

Magnetic drum   Cylinder with a magnetic outer surface on which data can be stored by magnetizing specific positions on the surface.

Magnetic tape   A sequential storage medium consisting of a narrow strip of material treated with a magnetizable coating upon which spots are magnetized to represent data.

Magnetic-ink character reader   A device that reads characters composed of magnetized particles; often used to sort checks for subsequent processing.

Magnetic-ink character recognition (MICR)   The process that allows magnetized characters to be read by a magnetic-ink character reader.

Mark I   First automatic calculator.

Master file   A file that contains all existing records organized according to the key field; updated by records in a transaction file.

Microcomputer   A small, low-priced computer used in homes, schools, and businesses; also called a personal computer or home computer.

Microprocessor   A programmable processing unit (placed on a silicon chip) containing arithmetic, logic, and control circuitry; used in microcomputers, calculators, microwave ovens, and for many other applications.

Microprogram   A sequence of instructions wired into read-only memory; used to tailor a system to meet the user's specific processing requirements.

Minicomputer   A type of computer with the components of a full-sized system but with smaller primary storage capacity.

Mnemonics   Symbolic names or memory aids used in assembly language and high-level programming languages.

Mouse   A desk-top input device that controls cursor movement, allowing the user to bypass the keyboard.

Multiphasic health testing (MPHT)   Computer-assisted testing plan that compiles data on patients and their test results. This data is then compared with norms or means to aid the physician in making a diagnosis.

Message switching   The task of a communications processor of receiving messages and routing them to appropriate destinations.

Modem   A device that modulates and demodulates signals transmitted over communication lines.

Modular approach   A method of simplifying a project by breaking it into segments or subunits.

Module   Part of a whole; a program segment or subsystem; set of logically related program statements that perform one given task in a program.

Modulation   A technology used in modems to make data processing signals compatible with communication facilities.

Multiplexer   A device that permits more than one I/O device to transmit data over the same communication channel.

Memory management/memory protection   In a multiprogramming environment, the process of keeping the programs in primary storage separate from each other.

Model   A representation of a real-world system; used to construct a DSS to help managers make decisions.

Management information system (MIS)   A formal network that uses computers to provide information used to support structured managerial decision making; its goal is to get the correct information to the appropriate manager at the right time.

Menu-driven   A program design that provides the user with "menus" displaying available choices or selections to help guide the user through the process of using a software package.

Modeling package   An application software program that uses the power and speed of a computer to simulate a real world situation.

Move   A feature of a program that allows an entire block of text to be shifted from one location to another.

Multiprocessing   A multiple CPU configuration in which jobs are processed simultaneously.

Multiprogramming   A technique that places several programs in primary storage at the same time, giving the illusion that they are being executed simultaneously; this results in increased CPU active time.

Natural language/query language   A language, designed primarily for novice computer users, that uses Englishlike sentences, usually for the purpose of accessing data in a data base.

Narrow bandwidth channel   A communication channel that can only transmit data at a rate of 45 to 90 baud; for example, telegraph channels.

Network   The linking together of several CPUs.

Network data structure   The data structure in which a primary data element may have many secondary elements and the secondary elements may have numerous primary elements.

Next-sequential-instruction feature   The ability of a computer to execute program steps in the order in which they are stored in memory unless branching takes place.

Nondestructive read/destructive write   The feature of computer memory that permits data to be read and retained in its original state, allowing repeated reference during processing.

Nonimpact printer   The use of heat, laser technology, or photographic techniques to print output.

Nuclear magnetic resonance (NMR) scanning   A computerized diagnostic tool that involves sending magnetic pulses through the body to identify medical problems.

Numeric bits   The four rightmost bit positions of 6-bit BCD used to encode numeric data.

Node   The endpoint of a network; consists of CPUs, printers, CRTs, and other physical devices.

Operating system (OS)   A collection of programs used by the computer to manage its operations; provides an interface between the user or application program and the computer hardware.

Object program A sequence of machine executable instructions derived from source-program statements by a language-translator program.

Overview diagram A diagram used in HIPO to describe in greater detail a module shown in the visual table of contents.

Operand The part of an instruction that tells the computer where to find the data or equipment on which to operate.

Online storage symbol A symbol that indicates that the file is kept on an online external storage medium such as disk or tape.

Output Information that comes from the computer as a result of processing into a form that can be used by people.

Octal number system Number system in which each position represents a power of 8.

Odd parity A method of coding in which an odd number of 1 bits is used to represent each character; facilitates error checking.

Office automation Integration of computer and communication technology with traditional office procedures to increase productivity and efficiency.

Offline Not in direct communication with the central computer.

Online In direct communication with the computer.

Online file access An access method in which records are updated when transactions are made; current information can be retrieved at any time.

Operand The part of an instruction that tells the computer where to find the data or equipment on which to operate.

Operation code Also known as op code; the part of an instruction that indicates what operation is to be performed.

Optical disk Also known as a laser disk; stores data as the presence or absence of a pit burned into the surface of the disk by a laser beam.

Optical-character recognition (OCR) A method of electronic scanning that reads numbers, letters, and other characters and then converts the optical images into appropriate electrical signals.

Optical-mark recognition (OMR) Mark sensing; a method of electronic scanning that reads marks on a page and converts the optical images into appropriate electrical signals.

Output Information that comes from the computer as a result of processing; in a form that can be used by people.

Operation code Also known as op code; the part of an instruction that indicates what operation is to be performed.

Page In a virtual storage environment, the portion of a program that is kept in secondary storage and loaded into real storage only when needed during processing.

Page frame In a virtual storage environment, one of the equal-sized physical areas into which primary storage is divided.

Paging A method of implementing virtual storage; data and programs are broken into equal-sized blocks, or pages, and loaded into real storage when needed during processing.

Partition In multiprogramming, the primary storage area reserved for one program; may be fixed or variable size.

Pascal A high-level language developed for education purposes, to teach programming concepts to students; named after French mathematician Blaise Pascal.

Piracy The unauthorized copying of a copyrighted computer program.

PL/1 (Programming Language One) A structured, general-purpose programming language used for both scientific and business applications.

Parent The primary data element in a data structure.

Parity bit A bit added to detect incorrect transmission of data; it conducts internal checks to determine whether the correct number of bits are present.

Plotter An output device that converts data emitted from the CPU into graphic form; produces hard-copy output.

Pointer An additional field in a record that contains the address of the next record to be accessed.

Primary key A unique field for a record; used to sort records for processing or to locate a particular record within a file.

Primary memory/storage Also known as internal storage or main storage; the section of the computer that holds instructions, data, and intermediate and final results during processing.

Printer   A device used to produce permanent (hard copy) computer output; impact printers are designed to work mechanically; nonimpact printers use heat, laser, or chemical technology.

Printer-keyboard   An output device similar to an office typewriter; prints one character at a time and is controlled by a program stored in the CPU of the computer.

Print-wheel printer   An output device consisting of 120 print wheels, each containing 48 characters. The print wheels rotate until an entire line is in the appropriate position, then a hammer presses the paper against the print wheel.

Privacy   An individual's ability to control the collection, processing, storage, dissemination, and use of data about personal attributes and activities.

Process   To transform data into useful information (by classifying, sorting, calculating, summarizing, storing).

Processor   The term used to refer collectively to the ALU and control unit.

Program   A series of step-by-step instructions that tells the computer exactly what to do.

Programmer   The person who writes step-by-step instructions for the computer to execute.

PROM (Programmable Read-Only Memory)   Read-only memory that can be programmed by the manufacturer or by the user for special functions to meet the unique needs of the user.

Punched cards   Heavy paper storage medium in which data is represented by holes punched according to a coding scheme much like that used on Hollerith's cards.

Page-oriented word processor   A word processor that treats a document as a series of pages; contrast to document-oriented word processor.

Pixel   The individual dot on a display screen that is combined with other dots to create characters and images.

Print formatting   The manner in which the word processor communicates with the printer to tell it how the text should be printed.

Parallel conversion   An approach to system implementation in which the new system is operated side-by-side with the old one until all problems are worked out.

Parallel processing   A type of processing in which instructions and data are handled simultaneously.

Phased conversion   An approach to system implementation in which parts of the new system are implemented throughout the organization one at a time.

Pilot conversion   An approach to system implementation in which the new system is implemented in only one part of the organization at a time.

Processing program   A routine, usually part of an operating system, used to simplify program preparation and execution.

Proper program   A program using the structured approach and top-down design, and having only one entrance and one exit.

Pseudocode   An informal, narrative language used to represent the logic patterns of structured programming.

Programmable communications processor   A device that relieves the CPU of the task of monitoring data transmission.

Propagation delay A time delay in a satellite communication system.

Remote network   A system where terminals are connected to the central computer by a communication channel.

Ring configuration   A network design in which a number of computers are connected by a single transmission line in a ring formation.

Run book   Program documentation designed to aid the computer operator in running a program; also known as the operator's manual.

Real storage   Primary storage; contrast with virtual storage.

Region   In multiprogramming with a variable number of tasks, a term often used to mean the internal space allocated; a variable-sized partition.

Random-access memory (RAM)   Form of primary storage into which instructions and data can be read, written and erased; directly accessed by the computer; temporary memory that is erased when the computer is turned off.

RAM disk   A portion of RAM memory that temporarily becomes a storage device through software control; it appears like a disk to the computer but is not actually a disk.

Randomizing (hashing)   A mathematical process applied to the record key that produces the storage address of the record.

Read/write head   An electromagnet used as a component of a tape or disk drive; in reading, it detects magnetized areas and translates them into electrical pulses; in writing, it magnetizes appropriate areas, thereby erasing data stored previously.

Read-only memory (ROM)   The part of computer hardware containing items (circuitry patterns) that cannot be delayed or altered by stored-program instructions.

Real-time   Descriptive of a system's capability to receive and process data, providing output fast enough to control the outcome of an activity.

Record   A collection of data items, or fields, that relates to a single unit, such as a student.

Register   An internal computer component used for temporary storage of an instruction or data; capable of accepting, holding, and transferring that instruction or data very rapidly.

Relational data structure   The data structure that places the data elements in a table with rows representing records and columns representing fields.

Remote terminal   A terminal that is placed at a location distant from the central computer.

Retrieve   To access previously stored data.

Ring list   A linked list containing pointer fields indicating the end of a chain; the last record contains a pointer back to the first record.

Robot   Machine that performs any of several tasks (such as moving or manipulating materials, parts, or tools) under stored-program control.

Resident routine   One of the most frequently used components of the supervisor, which 'is initially loaded into primary storage.

RPG (report program generator)   An example of a problem-oriented language originally designed to produce business reports.

Service bureaus   A business that provides data-processing services such as system development and computer operations.

Software compatibility   The ability to use programs written for one system on another system with little or no change.

Supercomputer The largest, fastest, most expensive type of computer in existence, capable of performing millions of calculations per second and processing enormous amounts of data; also called maxi computer or monster computer.

Simplex   A type of communication channel that provides for unidirectional, or one-way, transmission of data.

Star configuration   A network design in which all transactions must go through a central computer before being routed to the appropriate network computer.

Selection   Program logic that includes a test; depending on the results of the test, one of two paths is taken.

Simple sequence   Program logic in which one statement after another is executed in the order in which they are stored.

Source program   A sequence of instructions written in either assembly language or high-level language that is translated into an object program.

Structure chart   A graphic representation of top-down programming, displaying modules of the problem solution and relationships between modules; of two types-system and process.

Structured flowchart   Graphic representation of the logic patterns depicting the function of a program or module; the diagram is compactly arranged in a partitioned box; also called Nassi-Shneiderman chart.

Structured programming   A top-down modular approach to programming that emphasizes dividing a program into logical sections to reduce testing time, increase programmer productivity, and bring clarity to programming.

Screen editor   A word processing feature that allows the text on the entire screen to be edited.

Screen formatting   Word-processing features that control the way in which text appears on the display screen.

Scrolling   The process of moving a portion of a text file on to or off of the display screen; used to view portions of a document.

Search   A feature of a program that permits the user to locate a word or set of characters throughout a file.

Simulation   Duplication of conditions likely to occur in a real-world situation when variables are changed.

Spreadsheet   Also known as a ledger sheet; used by accountants for performing financial calculations and recording transactions.

Status area A portion of an electronic spreadsheet that appears at the top of the display and shows the location of the cursor within the spreadsheet and what was entered into a particular cell of the spreadsheet.

System   A group of related elements that work together toward a common goal.

System analysis report   A report given to top management after the system analysis phase has been completed; includes a statement of objectives, constraints, and possible alternatives.

System design report   A report given to top management after the system design phase that explains how various designs will satisfy the information requirements; includes flowcharts, narratives, resources required to implement alternatives, and recommendations.

System flowchart   A group of symbols that represents the general information flow within an information system; focuses on inputs and outputs rather than on internal computer operations.

Structured walkthrough   A formal evaluation of the documentation and coding of a program or system by a group of managers, analysts, and programmers to determine completeness, accuracy, and quality of design.

Segmentation   A method of implementing virtual storage; involves dividing a program into variable-sized blocks, called segments, depending on the program logic.

Secondary key   Fields that are used to gain access to records on a file; may not be unique identifiers.

Secondary storage   Also known as external or auxiliary storage; supplements primary storage and is external to the computer; data is accessed at slower speeds.

Second-generation computers   Computers that used transistors; smaller, faster, and had larger storage capacity than first-generation computers.

Semiconductor memory   Memory composed of circuitry on silicon chips.

Sequential file design   Records that are organized in a file in a specific order based on the value of the key field.

Sequential processing   The process of creating a new master file each time transactions are processed; requires batch file access.

Sequential-access storage   Auxiliary storage from which records must be read, one after another, in a fixed sequence, until the needed data is relocated; for example, magnetic tape.

Silicon chip   Solid-logic circuitry on a small piece of silicon used to form the primary storage of third-generation computers.

Simple list   A file without pointers.

Simulate   To duplicate conditions likely to occur in a real-world situation when variables are changed.

Soft copy   Data displayed on a CRT screen; not a permanent record.

Software   Program or programs used to direct the computer for solving problems and overseeing operations.

Sort   To arrange data elements into a predetermined sequence to aid processing.

Source-data automation   The use of special equipment to collect data at its point of origin.

Spatial digitizer   An input device that can graphically reconstruct a three-dimensional object on the computer display screen.

Store   To retain processed data for future reference.

Stored program   Instructions stored in the computer's primary memory in electronic form; can be executed repeatedly at the computer's own speed.

Stored-program computer   Computer that stores in main memory instructions in electronic form for operations to be performed.

Stored-program concept   The idea that program instructions can be stored in primary storage (computer memory) in electronic form so that no human intervention is required during processing; allows the computer to process the instructions at its own speed.

Subscripts   The row and column numbers that identify the location of a data element in a table.

Summarize   To reduce large amounts of data to a more concise and usable form.

Supercomputer The largest, fastest, most expensive type of computer in existence, capable of performing millions of calculations per second and processing enormous amounts of data; also called maxicomputer or monster computer.

System analyst   The person who is responsible for system analysis, design, and implementation of computer-based information systems and who is the communication link or interface between users and technical persons.

Sort/merge program   A utility program used to sort records to facilitate updating and subsequent combining of files to form a single, updated file.

Subroutine   A sequence of statements outside the main part of the program; saves the programmer time by not having to write the same instructions over again in different parts of the program.

Supervisor program   Also known as the monitor or executive; the major component of the operating system; coordinates the activities of all other parts of the operating system.

Swapping   In a virtual storage environment, the process of transferring a program section from virtual storage to real storage, and vice versa.

System library   A collection of files in which various parts of an operating system are stored.

System program   A sequence of instructions written to coordinate the operation of computer circuitry and to help the computer run quickly and efficiently.

System residence device   An auxiliary storage medium (disk, tape, or drum) on which operating system programs are stored and from which they are loaded into primary storage.

Syntax   Rules of a programming language that must be followed when coding instructions, just as syntactical rules must be followed in English.

System analyst   The person who is responsible for system analysis, design, and implementation of computer-based information systems and who is the communication link or interface between users and technical persons.

Tape cassette   A sequential-access storage medium (similar to a cassette used in audio recording) used in small computer systems for high-density digital recording.

Tape drive   A device that moves tape past a read/write head.

Telecommunications   The combined use of communication facilities, such as telephone systems and data-processing equipment.

Time-sharing   An arrangement in which two or more users can access the same central computer resources and receive what seems to be simultaneous results.

Transponders   Small amplifiers located on satellites, which receive signals from the earth station and reflect them to the receiving stations.

Top-down design   A method of defining a solution from general to specific in terms of major functions to be performed, and further breaking down the major functions into subfunctions; the further the breakdown, the greater the detail.

Telecommuting   Method of working at home by communicating via electronic machines and telecommunication facilities.

Teleconference   Method of conducting meetings between two or more remote locations via electronic and/or image-producing facilities.

Terminal   An input/output device through which data can be entered into or retrieved from a system.

Third-generation computers   Computers characterized by the use of integrated circuits, reduced size, lower costs, and increased speed and reliability.

Time-sharing   An arrangement in which two or more users can access the same central computer resources and receive what seems to be simultaneous results.

Touch screen   A computer screen that can detect the point at which it is touched by the user; it allows the user to bypass the keyboard.

Touch-tone device   A type of terminal used with ordinary telephone lines to transmit data.

Track   A horizontal row stretching the length of a magnetic tape on which data can be recorded; one of a series of concentric circles on the surface of a magnetic disk; one of a series of circular bands on a magnetic drum.

Transaction file   A file containing changes to be made to the master file.

Transistor   An on/off switch connecting the data line to the capacitor; a type of circuitry characteristic of second-generation computers; smaller, faster, and more reliable than vacuum tubes but inferior to third-generation, large-scale integration.

Trailer value   A value used to control loop execution in which a unique item signals the computer to stop performing the loop.

Thrashing   A situation in virtual storage in which little processing occurs in comparison to the amount of locating and swapping of pages or segments.

Template   A predefined set of formulas for use on an electronic spreadsheet.

Text editing   The process of making changes to a document after the text has been entered into the computer.

Transient routine   A supervisor routine that remains in secondary storage with the rest of the operating system.

User friendly   Describes computers or software that are easy to use and understand.

User's group   An informal group of owners of a particular brand of microcomputer who meet to exchange information about hardware, software, service, and support.

Unbundled   A way of selling computers in which vendor support and training items are priced separately

Undo   A feature of a program that allows the user to recover text that has been accidentally deleted.

UNIVAC I (UNIVersal Automatic Computer)   One of the first commercial electronic computers; became available in 1951.

Utility program   A program within an operating system that performs a specialized function.

Voice-grade channel   A communication channel that has a wider frequency range and can transmit data at a rate of forty-five to ninety bits per second; for example, a telegraph channel.

Visual table of contents   Similar to a structure chart; each block is given an identification number used as a reference to other HIPO diagrams.

Virtual storage   An extension of multiprogramming in which portions of programs not being used are kept in secondary storage until needed, giving the impression that primary storage is unlimited; contrast with real storage.

Vacuum tube   Light bulb-like device from which almost all air has been removed and through which electricity can pass; often found in old radios and televisions; used in first-generation computers to control internal operations.

Variable   A meaningful name assigned by the programmer to storage locations of which the values can change.

Variable-length records   A record format in which the unused character spaces are eliminated from the record.

Verify   To check the accuracy and completeness of data.

Very-large-scale integration (VLSI)   Further miniaturization of integrated circuits, offering even greater improvements in price, performance, and size of computers.

Visual display terminal   A terminal capable of receiving output on a cathode-ray tube (CRT) and, with special provisions, is capable of transmitting data through a keyboard.

Voice recognition system   An input system that allows the user to "train" the computer to understand his or her voice and vocabulary. The user must follow only the patterns the computer is programmed to recognize; also called audio input.

Voice response unit   A device through which the computer "speaks" by arranging half-second records of voice sounds or prerecorded words; also called audio output.

Volatility   The frequency of changes made to a file during a certain period of time.

Vertical software integration   The enhancement of a single software package. For example, adding a spelling checker to a word processing program.

Wafer integration   The concept of retaining the circuitry on the five-inch silicon chip, rather than breaking the individual chips off the wafer and then packaging and relinking them.

Window (window environment)   An operating system enhancement that allows more than one application software package to run concurrently.

Word processing   The manipulation of text data to achieve a desired output.

Word processing system   The computer system (hardware and software), or portion of the system, used for the task of word processing.

Word processor   An application software package that performs text-editing functions.

Word wrap   A feature of a program that automatically positions text so that full words are positioned within declared margins.

Wand reader   An input device used in reading source data represented in optical bar-code form or in human readable characters.

Word   A memory location within primary storage; varies in size (number of bits) from computer to computer.

Xerographic printer   A type of nonimpact printer that uses printing methods similar to those used in common xerographic copying machines.

Zone bit   Used in different combinations with numeric bits to represent numbers, letters, and special characters.

ENGLISH-UKRAINIAN VOCABULARY

Accounting machine   лічильна машина

Abnormal program   програма аварійного завершення

Access   доступ, звертання

Access mechanism   механізм доступу

Access time   тривалість доступу

Accessory program   допоміжна програма

Acoustic modem   акустичний модем

Activity   опрацювання запиту, активність, діяльність

Address   адреса

Algorithm   алгоритм

Analog computer   аналогова ЕОМ

Analog transmission   аналогова передача

APL (A Programming Language)   мова програмування

Application   прикладна програма, система, застосування, використання

Application program   прикладна програма

Approximate   наближувати

Archival copy   архівна копія

Arithmetic function   арифметична функція

Arithmetic and logic unit (ALU)   арифметико-логічний пристрій

Artificial intelligence (AI)   штучний інтелект

Assembly language   мова асемблера

Audit   ревізія, перевірка

Audit trail   контрольний журнал, програма записування та формування звітів

Automated data processing   автоматичне опрацювання даних

Automatic data processing (ADP)   автоматичне опрацювання даних

Back-end processor   післяпроцесор, процесор бази даних

Bandwidth   ширина смуги частот

Bar code scanner   пристрій читання штрихового коду, сканер штрихового коду

BASIC (Beginners' AH-purpose Symbolic Instruction Code)   Бейсик (алгоритмічна мова)

Batch   пакет, група

Batch file   командний файл

Batch processing   пакетне опрацювання

Baud   бод (одиниця швидкості передавання інформації)

Binary coded decimal (BCD)   двійкове-десяткове число

Binary number system   двійкова система числення

Binary representation   двійкове зображення

Bit (short for Binary digit)   двійковий розряд

Bit cells   однорозрядний регістр

Block   блок

Branch   перехід, розгалуження, відгалуження

Bubble memory   бульбашкова пам'ять

Buffer   буфер

Byte   байт

C   Сі (алгоритмічна мова)

Cache memory   надоперативна пам'ять, кеш-пам'ять

Calculate   обчислювати, рахувати

Call-back modem   модем зворотного зв'язку

Capability   можливість, здатність

Capacitor   конденсатор

Capacity   обсяг, місткість, продуктивність, гранична пропускна здатність, розрядність

Cartridge tape   касетна стрічка

Cassette tape   касетна стрічка

Cathode ray tube (CRT)   електронно-променева трубка

Cell   комірка пам'яті, елемент

Central processing unit (CPU)   центральний процесор

Centralized approach   централізований підхід

Centralized processing   централізоване опрацювання

Chain   ланцюжок, послідовність

Chain printer   принтер, друкарський пристрій

Character   символ, знак, літера

Character pattern   точкова матриця символу

Character printer   пристрій посимвольного друку

Charge-coupled device (CCD)   пристрій з електрично зв'язаними компонентами

Chart   схема, креслення, діаграма, графік

Check digit   контрольний розряд

Chief programmer   головний програміст

Chip   мікросхема

Circuitry   схеми, електричні кола

Clock speed   тактова частота

Coaxial   коаксіальний

COBOL (COmmon Business-Oriented Language)   Кобол (алгоритмічна мова)

Code   код, система кодування, програма, команда

Coding check   перевірка програми

Coding scheme   система кодування

Column   колонка, стовпець

Command-line interface   інтерфейс командних рядків

Communication channel   канал зв'язку

Communications processor   комунікаційний процесор

Compatibility   сумісність

Compatible   сумісний

Compiler   компілятор, транслятор

Compiling   компіляція, компілювання, трансляція, транслювання, укладання, складання

Computation   обчислення

Computer   комп'ютер, ЕОМ, обчислювальна машина

Computer crime   незаконне користування комп'ютером

Computer literacy   комп'ютерна грамотність

Computer screen   екран комп'ютера

Computer security   захист комп'ютерних даних

Computer store   крамниця для продажу комп'ютерів

Computer-aided design (CAD)   автоматизоване проектування

Computer-assisted instruction (CAI)   комп'ютеризоване навчання

Computerized axial tomography (CT or CAT scanning)   комп'ютерна томографія

Concentrator   концентратор, зосереджувач

Concurrently   паралельно, одночасно

Control program   керівна програма

Control unit   пристрій керування

Conversion   перетворення, перекодування

Convert перетворювати

Coprocessor   співпроцесор

Copy protection   захист від копіювання

Copyright   авторське право

Counter   лічильник

Coustic coupler   гніздо для під'єднання телефонів

Cursor   курсор

Daisy-wheel printer   пелюстковий друкарський пристрій

Data   дані, інформація

Data base   база даних

Data communication   передавання даних

Data encryption   шифрування даних

Data entry   введення даних, інформаційний елемент

Data field   поле даних

Data file   файл даних

Data flow   потік даних

Data item   елемент даних

Data processing   опрацювання даних

Data structure   структура даних

Data-base analyst   програміст бази даних

Debug   налагоджувати

Debugging   налагоджування

Decimal system   десяткова система числення

Decision model   модель прийняття рішень

Decision support system (DSS)   система забезпечення прийняття рішень

Decision table   таблиця розв'язків

Declaration   опис, визначення, оголошення, декларація

Deletion   вилучення, усунення, витирання

Demodulation   демодуляція

Design   проект, проектування

Design aids   засоби проектування

Destructive read   руйнівне читання (даних)

Diagram   схема, графік, діаграма

Digital computer   цифрова ЕОМ

Digital transmission   цифрова передача

Digitizer   перетворювач у цифрову форму, дискретизатор

Direct access   прямий доступ

Direct access storage   запам'ятовувальний пристрій з прямим доступом

Direct-access file   файл прямого доступу

Direct-connect modem   модем з безпосереднім зв'язком

Directory   каталог, довідник

Disk drive   дисковод, накопичувач на дискетах

Disk pack   дисковий пакет

Distributed data processing (DDP) system   розподілена система опрацювання даних

Distributed processing   розподілене опрацювання

Dot-matrix printer   матричний друкарський пристрій

Downtime   час простою

Drill   практичне опрацювання, навчання

Drum printer   барабанний друкарський пристрій

Dumb terminal   неінтелектуальний елемент, термінал уведення-виведення

Dummy module   фіктивний модуль

Duplication   дублювання, копіювання

Editing   редагування

Electrical charge   електричний заряд

Electrical circuit   електронна схема

Electrical current   електричний струм

Electrical flow   електричний потік

Electronic data processing (EDP)   електронне опрацювання даних

Electronic mail   електронна пошта

Electronic pulse   синхроімпульс, тактовий імпульс

Electrostatic printer   електростатичний друкарський пристрій

Electrothermal printer   пристрій термодруку

EPROM (Erasable Programmable Read-Only Memory)   ППЗП, програмована постійна пам'ять

Even parity   перевірка парності

Exception report   повідомлення про виняткові ситуації

Executable form   виконавча форма

Expert system   експертна система

Facility   засіб, обладнання, пристрій

Feedback   зворотний зв'язок

Field   поле, ділянка, сфера

File   файл

File handler   програма опрацювання даних

First-generation computer   ЕОМ першого покоління

Fixed-length record   запис фіксованої довжини

Flexibility   гнучкість

Flexible disk   гнучкий диск, дискета

Flexible system   гнучка система

Floppy disk   гнучкий диск, дискета

Flowchart   блок-схема

Flowline   лінія зв'язку

Formatting   форматування, розмічування

FORTH   Форт (алгоритмічна мова)

FORTRAN (FORmuIa TRANslator)   Фортран (алгоритмічна мова)

Fourth-generation computer   ЕОМ четвертого покоління

Front-end processor   попередній процесор, комунікаційний процесор

Full-duplex   дуплексний зв'язок

Garbage   зайві дані, непотрібна інформація, сміття (інформаційне)

General-purpose computer   універсальна ЕОМ

GOTO statement   оператор переходу

Grade   якість

Graph   графік, діаграма

Graphic display   графічний дисплей

Graphics software package   графічний пакет програм

Graphics tablet   графічний планшет

Grid chart   координатна сітка

Half-duplex   напівдуплексний зв'язок

Hard disk   твердий диск

Hardcopy   документальна копія

Hardware   технічне забезпечення, апаратура

Hierarchical approach   ієрархічний підхід

Hierarchical configuration   ієрархічна конфігурація

Hierarchical data structure   ієрархічна структура даних

High-level language   мова високого рівня

High-level programming languages   мова програмування високого рівня

Hollerith code   код Голлеріта

I/O operation   операція введення/виведення

Icon   піктограма, графічний символ, зображення

Image   зображення, образ, відображення

Impact printer   пристрій контактного друку

Implementation   реалізація, впровадження

Information   інформація

Information system   інформаційна система

Ink-jet printer   пристрій струменевого друку

Input   вхід, уведення, вхідні дані, пристрій уведення

Input/output   management   system   адміністративна   система введення/виведення

Inquiry   запитання, запит

Insertion   вставлення, вставка

Instruction set   система команд, набір команд

Integrated circuit   інтегральна схема

Integrated software   інтегральний програмний комплекс

Integration   інтеграція, об'єднання (у систему), інтегрування

Intelligent terminal   інтелектуальний термінал

Interactive   інтерактивний, діалоговий

Interactive processing   діалогове опрацювання

Interblock gap (IBG)   міжблоковий проміжок

Interface   чергування, розгортка через рядок

Internal modem   вбудований модем

Interpretation   інтерпретація

Interpreter program   інтерпретатор

Interrecord gap (IRG)   проміжок між записами, сигнал кінця запису

Inverted list   інвертований список, обернений список

Job   завдання

Job-control language (JCL)   мова керування завданнями

Job-control program   програма керування завданнями

Joystick   джойстик

Junction   з'єднання

K (KiloByte)   кілобайт (1024 байти)

Key   ключ, клавіша, шифр

Key field   поле ключа

Keypunch   клавішний перфоратор

Language-translator program   транслятор

Large-scale integration (LSI)   інтеграція високого рівня

Laser   лазер

Laser beam   лазерний промінь

Laser printer   лазерний друкарський пристрій

Laser storage   лазерна пам'ять, лазерний запам'ятовувальний пристрій

Librarian program   бібліотекар (програма, яка керує роботу з бібліотечними програмами)

Library program   бібліотечна програма

Light pen   світлове перо

Line editor   редактор рядків, рядковий редактор

Line printer   пристрій друку рядками

Link   лінія зв'язку

Linkage editor   редактор зв'язків, зв'язувальний транслятор, укладач

Linked list   список з вказівниками, зв'язний список, ланцюговий список

LISP (LISt Processing)   Лісп (алгоритмічна мова)

List   список, перелік

Listing   роздрук

Local-area network (LAN)   локальна мережа

Logical module   логічний модуль

Logical record   логічний запис

Loop   цикл, петля

Low-level language   мова низького рівня

Machine language   машинна мова

Magnetic core   запам'ятовувальний пристрій на магнітних осердях, феритова пам'ять

Magnetic disk   магнітний диск

Magnetic domain   магнітний домен

Magnetic drum   магнітний барабан

Magnetic media   магнітний носій (даних)

Magnetic tape   магнітна стрічка

Main storage   оперативна пам'ять, основна пам'ять

Mainframe   універсальна ЕОМ, центральний процесор

Mainframe computer   головна ЕОМ

Maintainability   ремонтопридатність

Management information system (MIS)   адміністративно-інформаційна система, інформаційно-керівна система

Manipulate   орудувати, маніпулювати, керувати

Mass storage   запам'ятовувальний пристрій великого обсягу

Master file   основний файл

Media   носії (даних), засоби інформації

Megahertz (MH$_Z$)   мегагерц

Membrane keyboard   мембранна клавіатура

Memory location   комірка пам'яті

Memory management   розподіл пам'яті, керування пам'яті

Memory protection   захист пам'яті

Menu   меню

Menu-driven   керований через меню

Message switching   перемикання повідомлень

Microcomputer   мікрокомп'ютер

Microfilm   мікрофільм

Microprocessor   мікропроцесор

Microprogram   мікрограма

Minicomputer   міні-ЕОМ, міні-комп'ютер

Model   модель, схема

Modem   модем

Modular approach   модульний підхід

Modulation   модуляція

Module   модуль

Monitor   керівна програма, монітор, контрольний пристрій

Mouse   мишка (маніпулятор)

Move   пересилати (дані), переміщувати

Multiplexer   мультиплексер, ущільнювач, комутатор

Multiprocessing   мультипроцесорний режим, одночасне виконання, одночасне виконання (даних)

Multiprogramming   мультипрограмування, багатозадачний режим

Narrow band channel   вузькосмуговий канал

Natural language/query language   розмовна мова/мова запитів

Network   мережа, комп'ютерна мережа, схема

Network configuration   конфігурація мережі

Network data structure   мережева структура даних (у базах даних)

Node   вузол

Nondestructive read   неруйнівне читання (даних)

Nonimpact printer   безконтактний друкарський пристрій

Number system   система числення

Object program   об'єктна програма, вихідна програма

Occurrence   екземпляр, входження, подія, випадок, наявність

Odd parity   перевірка непарності

Office automation   автоматизація діловодства

Off-line   незалежний, автономний, вимкнений

On-line   інтерактивний, діалоговий, неавтономний, залежний, під'єднаний, лінійний

Operand   операнд

Operating system (OS)   операційна система

Operation code   код операції

Optical disk   оптичний диск

Optical fiber   світлопровід

Optical-character recognition (OCR)   оптичне розпізнавання символів

Option   варіант, версія, можливість, вибір, режим, пункт меню

Output   виведення (даних), вихідні дані, пристрій виведення, вихід

Package   модуль, пакет, корпус

Paddle   однокоординатний маніпулятор

Page   сторінка, сторінка пам'яті

Page frame   сторінка (пам'яті)

Paging   сторінкова організація, заміна сторінок, поділ на сторінки

Parallel processing   паралельне виконання

Parent   твірний елемент (вузол)

Parity bit   розряд парності

Partition   поділ, розділення, частина

Pascal   Паскаль (алгоритмічна мова)

Password   пароль

Pattern   зображення, графічний шаблон, комбінація (символів)

Pixel (PIcture ELement)   елемент зображення, піксел, цятка

PL/1 (Programming Language One)   ПЛ/1 (алгоритмічна мова)

Platter   твердий (магнітний) диск

Plotter   графопобудовник, реєстратор

Pointer   вказівник

Portable computer   портативний комп'ютер

POS (Point Of Sale) terminal   касовий термінал

Power failure   вихід з ладу системи живлення

Power source   джерело живлення

Primary key   первинний ключ

Primary storage   основна пам'ять, оперативна пам'ять, первинний запам'ятовувальний пристрій

Printer   друкарський пристрій, принтер

Privacy   конфіденційність, таємниця

Process   процес

Processing program   програма опрацювання

Processor   процесор, програма опрацювання

Program   програма

Program statement   оператор програми

Programmer   програміст

Programming   програмування

Proliferation   розповсюдження

PROM (Programmable Read-Only Memory)   ППЗП, програмована постійна пам'ять

Propagation delay   затримка поширення (сигналу)

Pseudocode   псевдокод

Punched card   перфокарта

RAM disk   псевдодиск, віртуальний диск

Random   випадковий, довільний

Random-access memory (RAM)   запам'ятовувальний пристрій з довільним доступом, оперативна пам'ять, пам'ять з довільним доступом

Randomizing (hashing)   змішування

Read/write head   головка читання/запису

Read-only memory (ROM)   ПЗП, постійна пам'ять

Real storage   фізична оперативна пам'ять, реальна пам'ять

Real-time   реальний (дійсний) час

Record   запис

Record address   адреса запису

Recorder   пристрій запису, записувальний пристрій, реєстратор

Region   ділянка, зона, область, регіон, сфера

Register   регістр

Relational data structure   реляційна структура даних

Reliable   надійний

Remote input device   віддалений пристрій уведення

Remote network   віддалена мережа

Remote terminal   віддалений термінал

Replacement   заміна

Report   звіт, повідомлення, зображення даних

Reside   (постійно) перебувати

Resident   постійний (у пам'яті), резидентний

Resistance   опір

Retrieve   знову знаходити, відновлювати

Reusable   багатократне використання

Review   огляд, аналіз

Ring configuration   кільцева конфігурація

Robot   робот

Routine   підпрограма, програма, стандартна програма

Row   ряд, рядок

RPG (report program generator)   генератор звітів

Run book   документація до задачі

Satellite   супутник

Scanner   сканер, пристрій сканування

Screen editor   екранний редактор

Screen formatting   форматування зображення на екрані

Scrolling   прокручування, переглядання, переміщування

Search   пошук, перегляд

Secondary key   вторинний ключ

Secondary storage   зовнішня пам'ять, допоміжна пам'ять, допоміжний запам'ятовувальний пристрій

Second-generation computers   ЕОМ другого покоління

Security   захист

Segmentation   поділ на сегменти, сегментація

Selection   вибір, селекція

Semiconductor memory   напівпровідниковий запам'ятовувальний пристрій, напівпровідникова пам'ять

Sequential processing   послідовне виконання

Sequential-access storage   пам'ять з послідовним доступом, запам'ятовувальний пристрій з послідовним доступом

Silicon chip   мікросхема на кремнієвій основі

Simplex   симплекс, односторонній зв'язок

Simulate   моделювати

Simulation   моделювання, імітаційне моделювання

Simultaneous processing   паралельне опрацювання

Softcopy   зображення на екрані дисплея

Software   програмне забезпечення

Software compatibility   програмна сумісність

Software package   пакет програм

Solution   розв'язок, розв'язування

Sort   сортування, упорядкування

Source program   початкова програма

Source-data automation   автоматичне формування первинних даних

Speech recognition system   система розпізнавання мовлення

Spooler   пристрій перемотування, буфер, програма довантажування, програма розвантажування

Spreadsheet   електронна таблиця, програма табличних розрахунків, табличний процесор

Stand-alone mode   автономний режим

Star configuration   зіркова конфігурація

Storage   пам'ять, запам'ятовувальний пристрій, пристрій зберігання інформації, накопичувач

Storage medium   носій пам'яті

Store   запам'ятовувальний пристрій, пам'ять

Stored program   завантажена програма

Stored program concept   принцип зберігання програми в пам'яті ЕОМ

Stored-program computer   ЕОМ із фіксованою програмою

Structure chart   структурна схема

Structured design   структурне проектування

Structured flowchart   структурна блок-схема

Structured programming   структурне програмування

Structured walkthrough   структурний критичний аналіз

Submit   запустити (програму)

Subroutine   підпрограма

Subscript   індекс, нижній індекс

Summarize   підсумовувати

Supercomputer супер-ЕОМ, суперкомп'ютер

Supervisor program   керівна програма, програма супервізора

Swapping   перевантаження, обмін

Switch   перемикач, комутатор

Syntax   синтаксис

Sysop   **(SYStem OPerator)**   системний оператор

System   система, пристрій, комплекс

System analysis   системний аналіз

System design   проектування системи

System development   розроблення системи

System device   системний пристрій

System flowchart   системна блок-схема

System library   системна бібліотека

System maintenance   супровід системи, обслуговування системи

System program   системне програмування

System security   захист системи

Systems analyst   системний аналітик (спеціаліст у галузі системного аналізу)

Tape drive   накопичувач на магнітній стрічці, пристрій протягування стрічки

Technique   метод, методика, техніка

Telecommunication   дистанційний зв'язок, дистанційне передавання даних, телезв'язок, телекомунікація

Teleconference   телеконференція

Template   шаблон

Terminal   термінал

Text editing   редагування тексту

Third-generation computer   ЕОМ третього покоління

Thrashing   переповнювання (пам'яті)

Time-sharing   розподіл часу, режим розподілу часу

Top-down design   низхідне проектування

Touch screen   сенсорний екран

Track   доріжка, тракт

Transaction   вхідне повідомлення, опрацювання запиту, виконання

Transaction file   файл змін

Transfer   передача (даних), перенесення, переміщення, пересилання, перехід

Transient routine   нерезидентна програма

Transistor   транзистор

Transponder відповідач

Transportable   мобільний

Typewriter   друкарський пристрій

Undo   відміна (команди), повернення (до попереднього стану), відміняти

UPC (Universal Product Code)   універсальний штриховий товарний код

Update   змінювати, модифікувати, оновлювати

User group   група користувачів

Utility program   службова програма

Vacuum tube   електронна лампа

Variable-length record   запис змінної довжини

Verify   перевіряти, контролювати, звіряти, зіставляти

Virtual storage віртуальна пам'ять, віртуальний запам'ятовувальний пристрій

Voice input device пристрій мовленнєвого введення

Voice recognition system система розпізнавання голосу

Voice-grade channel телефонний канал

Volatility мінливість, енергозалежність

Wand ручний сканер

Wheel printer пелюстковий друкарський пристрій

Window (window environment) вікно, віконне середовище

Wire дріт, провід, шина

Word слово

Word processing текстовий редактор, система опрацювання текстів

Word processor система опрацювання текстів, текстовий процесор

Word size довжина слова

Word wraps автоматичний перехід до нового рядка, автоматичне перенесення (слова)

Zone bit біт зони

APPENDIX 1
Latin Words and Phrases

A. D. Anno Domini	нашої ери
a d. (a dato)	з дня підпису
addendum	додаток
ad exemplum	за зразком
ad legem	за законом
ad referendum	для подальшого розгляду
ad val	згідно з вартістю
a. c. (anni currentis)	цього року
appendix	додаток
contra	проти, всупереч
consensus	згода
copia vera	копія правильна
de dato	датований
de facto	дійсно, фактично
de jure	формально, за законом
e. g. (exempli gratia)	наприклад
ex lege	згідно із законом
force majeure	надзвичайна обставина
hoc est (h. e.)	це означає
id est (i. e.)	тобто
ibidem (ib.)	там же
in brevi	коротко
in facto	фактично
in pari passu	на рівних засадах
in persona	особисто
NB (nota bene)	зверни увагу
omnius concensu	за загальною згодою
per annum	щорічно
per capita	на душу населення
per procurationem (p. p.)	за дорученням
post factum	після того, як подія відбулася
postscriptum (P. S.)	постскриптум, додаток до
status juridicus	правовий стан
status quo	фактичний стан
verso folio	на звороті
via	через, при посередництві
vice versa	навпаки

APPENDIX 2
Abbreviations

ADP (Automatic Data Processing) автоматичне опрацювання даних

AI (Artificial Intelligence) штучний інтелект

ALU (Arithmetic Logic Unit) арифметико-логічний пристрій

APL (A Programming Language) мова програмування

BASIC (Beginners' AH-purpose Symbolic Instruction Code) Бейсик (алгоритмічна мова)

BCD (Binary Coded Decimal) двійкове-десяткове число

CAD (Computer-Aided Design) автоматизоване проектування

CAI (Computer-Aided Instruction) комп'ютеризоване навчання

CAL (Computer –Assisted Learning) комп'ютеризоване навчання

CAN (Control Area Network) мережа контролерів

CCD (Charge-Coupled Device) пристрій з зарядовим зв'язком

COBOL (COmmon Business-Oriented Language) Кобол (алгоритмічна мова)

CPU (Central Processing Unit) центральний процесор

CRT (Cathode Ray Tube) електронно-променева трубка

CT or CAT scanning (Computer Aided Tomography) комп'ютерна томографія

DDP (Distributed Data Processing System) розподілена система опрацювання даних

DSS (Decision Support System) система забезпечення прийняття рішень

EDP (Electronic Data Processing) електронне опрацювання даних

EIS (Executive Information System) виконавча інформаційна система

EPROM (Erasable Programmable Read-Only Memory) ППЗП, програмована постійна пам'ять

FD (Flexible Disk) гнучкий диск

FORTRAN (FORmuIa TRANslator) Фортран (алгоритмічна мова)

IBG (InterBlock Gap)   міжблоковий проміжок

IRG (InterRecord Gap)   проміжок між записами, сигнал кінця запису

IS (Information System) інформаційна система

IT (Information Technology) інформаційна технологія

JCL (Job-Control Language)   мова керування завданнями

LAN (Local-Area Network)   локальна мережа

LISP (LISt Processing)   Лісп (алгоритмічна мова)

LSI (Large-Scale Integration)   інтеграція високого рівня

LU (Logical Unit)   логічний елемент, логічний пристрій

MIPS (Million Instructions Per Second) мільйон операцій за секунду

MIS (Management Information System)   адміністративно-інформаційна система, інформаційно-керівна система

NFS (Network File Standard) стандарт мережених файлів

OCR (Optical-Character Recognition)   оптичне розпізнавання символів

OS (Operating System)   операційна система

Pixel (PIcture ELement)   елемент зображення, піксел, цятка

PL/1 (Programming Language One)   ПЛ/1 (алгоритмічна мова)

PROM (Programmable Read-Only Memory)   ППЗП, програмована постійна пам'ять

PSE (Project Support Environment)   комп'ютерне забезпечення проектування

RAM (Random-Access Memory)   запам'ятовувальний пристрій з довільним доступом, оперативна пам'ять

ROM (Read-Only Memory)   ПЗП, постійна пам'ять

RPG (Report Program Generator)   генератор звітів

UPC (Universal Product Code)   універсальний штриховий товарний код

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