Computer hardware: Computer hardware refers to the physical components that make up computer system, such as the case, central processing unit (CPU), monitor, mouse, keyboard,computer data storage, graphics card, sound card, speakers and motherboard.central processing unit (CPU): is the electronic circuitry within a computer that executes instructions that make up a computer program, Or is the computer component that's responsible for interpreting most of the commands from the computers other hardware and software also called a central processor, main processor or just processor.The CPU is comprised of three main parts: 1- Arithmetic Logic Unit (ALU): Executes all arithmetic and logical operations.Arithmetic calculations like as addition, subtraction, multiplication and division.Logical operation like compare numbers, letters, or special characters.Also at this time, Xerox(R) was carrying out some pioneering work on the human/computer interface at their Palo Alto Research Center, Xerox PARC.Here they studied what later would become computer networks,Windows(R) operating system.The second generation: The next generation spanned the period from 1940-1960.Here electronic devices-vacuum tubes-were used as the active device or switching element.Although the vacuum tube computers were much faster than the mechanical computers of the preceding generation,they are thousands of times slower than the computers of today.Program instructions were given in machine language, which is a code composed entirely of Os and 1s.List of computer hardware; - Motherboard - Video - Sound card - Hard drive - Optical drive - USB ports Power supply Motherboard: The motherboard is the main component of a computer.It is a board with integrated circuitry that connects the other parts of the computer including the CPU, Primary Memory, Secondary Memory.It tells the computer's memory, arithmetic logic unit and input and output devices how to respond to the instructions that have been sent to the processor.- The first generation: Back to the beginning; the first generation of computing engines was comprised of the mechanical devices (called calculating machines).Even a vacuum tube is millions of times larger than the transistor on a silicon wafer.Companies such as Dep.Medical Physics IBM(R),Burroughs(R) and Univac(R) built large mainframe computers.Software includes all different programs on a computer, such as applications and the operating system.The abacus, the adding machine, the punch card reader for textile machines fit into this category.Programmers stopped programming in machine language and assembly language and began to use FORTRAN,COBOL and BASIC.Primary Memory: Random-access memory (RAM): Is the physical hardware inside a computer that temporarily stores data, serving as the computer working memory.additional RAM allows a computer to work with more information at the same time, which usuallyhas a dramatic effect on total system performance.ROM devices do not allow data stored on them to be modified.Secondary Memory: 1- Hard drive 2- Optical Disk 3- Flash Disk The generations of computers.They were built using gears and powered by a hand-operated crank.Here the transistor replaced the vacuum tube, and suddenly the computers began to be able to do real work.Software: is a set of instructions and documentation that tells a computer what to do or how to perform a task.