

What do you mean by computer generation? How many generations are there? What is the time-periods they cover? What technologies were/are used?

Generation in computer terminology is a change in technology a computer is/was being used. Initially, the generation term was used to distinguish between varying hardware technologies. Nowadays, generation includes both hardware and software, which together make up an entire computer system.

There are a total of five generations of computer:

1) First generation computer

The time period of first-generation computer is 1946-1959. The first generation of computers used vacuum tubes as basic components and circuitry for CPU (Central processing unit). The first ever computer was a first-generation computer. Some computers of this generation are ENIAC, EDVAC, UNIVAC, etc.

2) Second generation Computer

The time period of second-generation computer is 1959-1964. The second generation of computer used transistors instead of vacuum tubes as basic components resulting in compact sizes, faster speed, etc. Magnetic cores are used as primary storage. Magnetic disks and tapes are used as secondary storage. Some computers of this generations are IBM 1620, IBM 7094, UNIVAC 1108, etc.

3) Third generation computer

The time period of third-generation computer is 1964-1971. The third-generation of computer used integrated circuits (ICs) as basic components instead of vacuum tubes and transistors, which made the computer more compact, efficient and fast. Semiconductor like RAM and ROM were used as primary storage. Some computers of this generation are IBM-360 series, PDP, Honeywell-6000 series, etc.

4) Fourth generation computer

The time period of fourth-generation computer is 1971-1980. The fourth-generation of computer used very large-scale integrated circuits (SLCIC) as the basic components instead of integrated circuit (ICs). It started the personal computer (PC) revolution. Some computers of this generation are DEC 10, STAR 1000, PDP 11, etc.

5) Fifth generation computer

The time period of fifth-generation computer is 1980-till date. The fifth-generation of computer uses microprocessor chips as the basic components which has resulted in the concept of artificial intelligence. Some computers of this generation are desktop, laptop, etc.