

Micro Computers

Desktop computers, laptops, personal digital assistant (PDA), tablets & smartphones are all types of microcomputers. The micro-computers are widely used & the fastest growing computers. These computers are the cheapest among the other three types of computers. The Micro-computers are specially designed for general usage like entertainment, education and work purposes.

		
Desktop PC	Laptop/notebook PC	Netbook PC
		
Tablet PC	PDA	Smartphone

Generations of Computer

The generation of computer describe the major technological developments happened in the field of computer over the year.

There are five generations of computers till now. The brief description of these is as follow :

FIRST GENERATION (1942-1955)

Characteristic features of first-generation computers

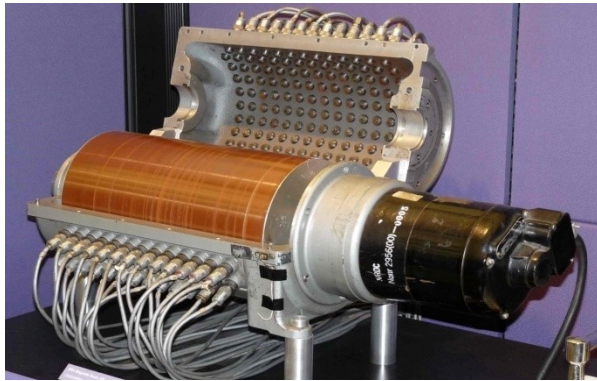
1. They were the fastest calculating devices of their time.
2. They were too bulky in size, very expensive, requiring large air conditioned room for installation.
3. They made use of vacuum tubes which are the only electronic component available during those days. They produce lots of heat and consumes lots of electricity.
4. The processing speed of this generation of computers was in milliseconds.
5. These computers were programmed in machine language and later on in assembly language.
6. In this generation punched cards were used to input data and instructions and output was obtained in the form of print. Primary memory was made up of electromagnetic relay while the secondary memory was made up of in magnetic drums.
7. These computers need to be assembled manually and very difficult to program therefore the commercial use was very less.

Few Examples are:

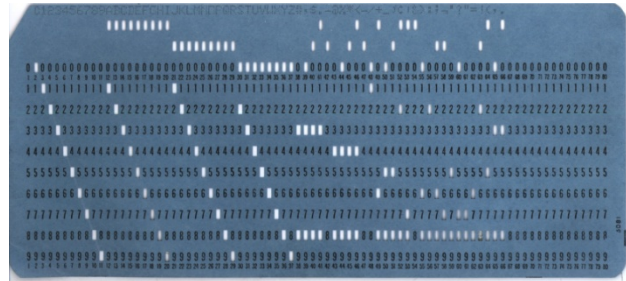
1. ENIAC (Electronic Numeric Integrator and Calculator)
2. UNIVAC (Universal Automatic Computer)



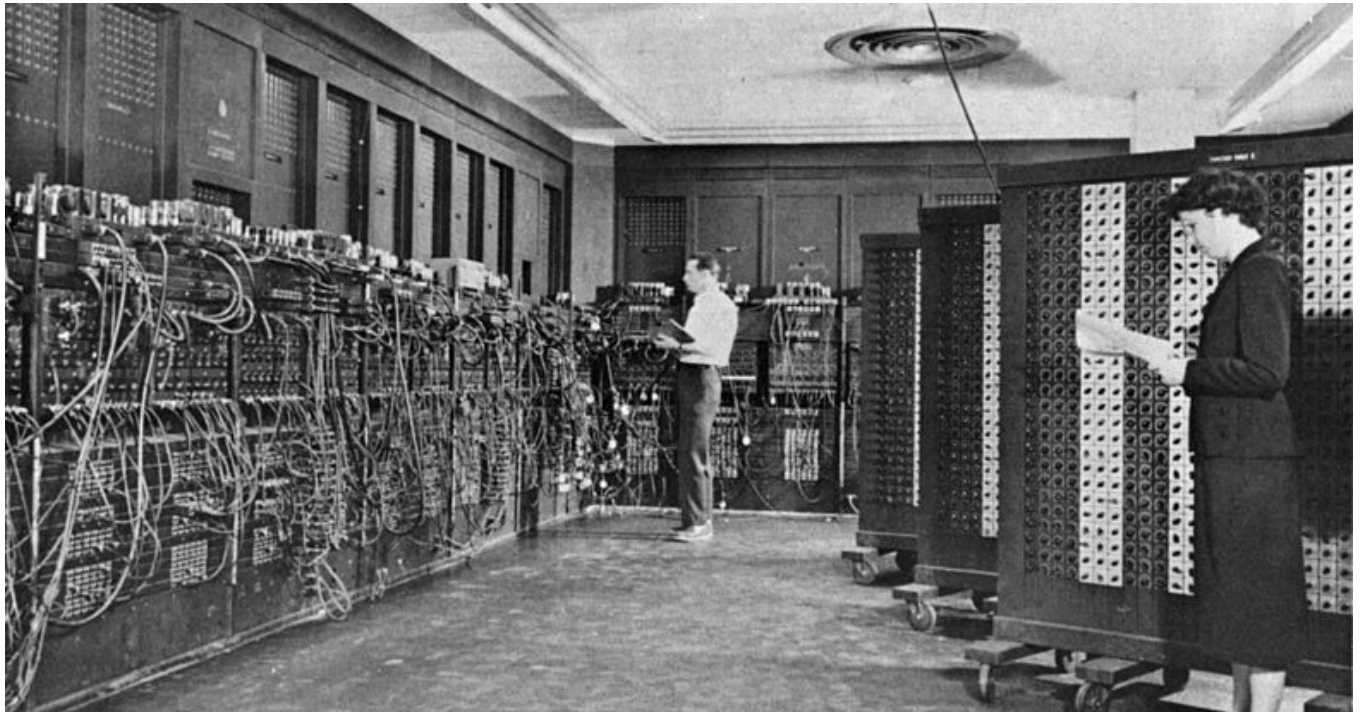
Vacuum Tubes



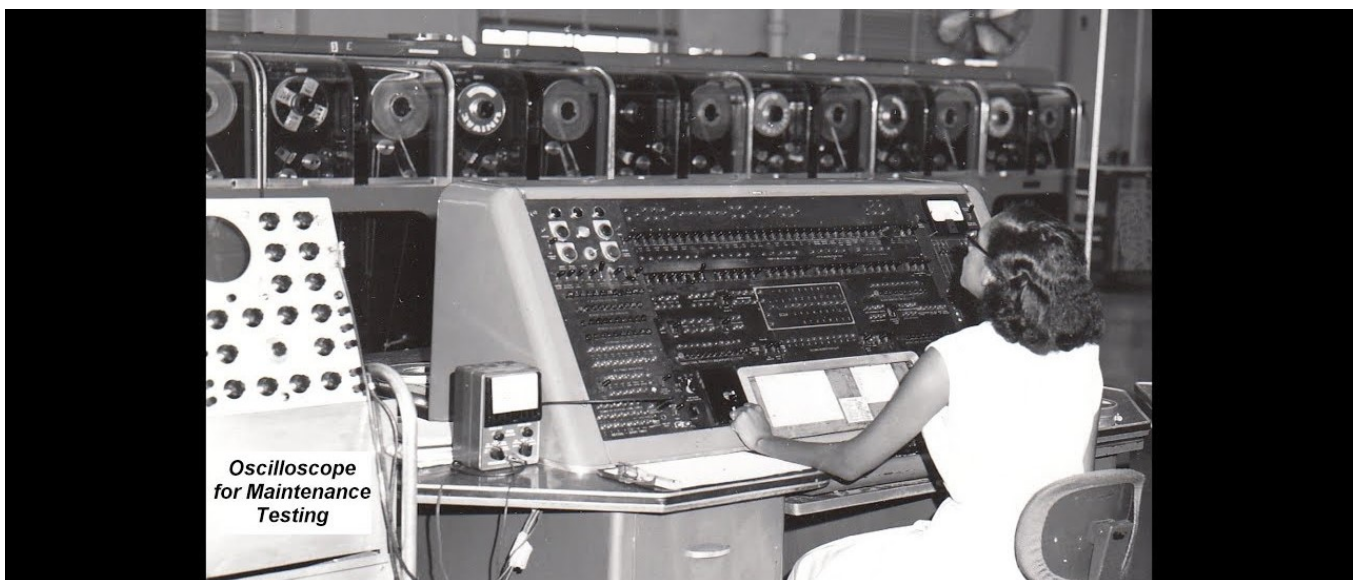
Magnetic Drum



Punched Card



ENIAC



UNIVAC

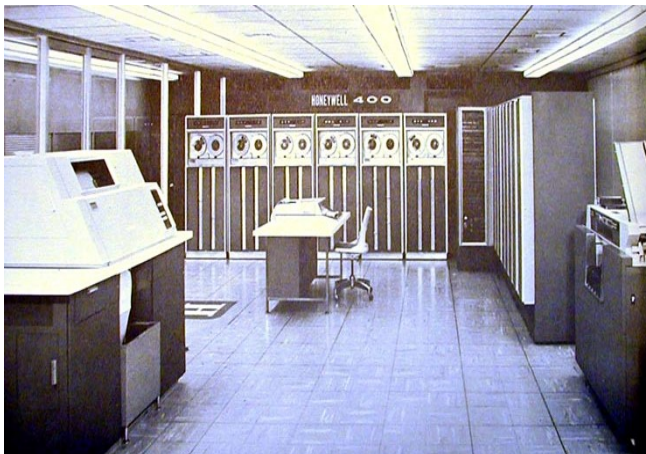
Second Generation Computers (1955-1964)

Characteristic features of Second Generation Computers

1. Vacuum Tubes were replaced by Transistors
2. They were smaller than first generation computers and require less space.
3. They consume less power and dissipated less heat but there was still the requirement of air conditioning.
4. They were more reliable and less prone to hardware failure.
5. They have faster and larger primary and secondary storage.
6. Memory of second generation computers was composed of magnetic cores. Later on magnetic tape and magnetic disk was also invented.
7. 10 kb primary memory.
8. Second generation computers uses the batch processing.
9. Data was input through punched cards.
10. The Programming languages such as FORTRAN, COBOL, ALGOL etc. made programming of these computers easier.
11. They were easier to program and use. Hence, they had wider commercial use in comparison to 1st generation computers.
12. In these computers thousands of transistor had to be assembled by hands into electronic circuits.



Few Examples are:



Honey Well 400



IBM7094

3rd Generation Computers (1964-1975)

Characteristic features of 3rd Generation Computers

1. IC's or Integrated circuits were used as electronic components.