

## COMPUTER GENERATIONS

Generation	Hardware Components	Languages	Characteristics	Computers/Systems
First Generation (1945-1959)	* Vacuum Tubes	* Machine Language	* Huge Size * Highly Expensive * High Consumption of Electricity	* ENIAC * UNIVAC * EDVAC * EDSAC * IBM-701
Second Generation (1959-1965)	* Transistors * Magnetic Tapes	Assembly Languages * FORTRAN * COBOL etc.	* Batch Processing, Multi Programming OS * Expensive	* IBM 7000 * CDC 1604 * Atlas * NCR 304 * Honeywell 400
Third Generation (1965-1975)	* Integrated Circuits(IC)	* Pascal * BASIC * ALGOL etc.	* Remote Processing, Time Sharing, Multi Programming OS * Faster, Compact & Cheaper	* IBM 360/370 * PDP 8/11 * CDC 6600
Fourth Generation (1975-1988)	* VLSI Microprocessor circuits	High Level Languages * C, C++, DBASE etc.	* Time-sharing, Real-time networks, distributed , GUI OS	* DEC 10 * Star 1000 * CRAY I/II * Apple II * VAX 9000
Fifth Generation (1988-Present)	* ULSI Microprocessor circuits	High Level Languages * Ruby * Perl * Python * Java etc.	* Parallel Processing & Artificial Intelligence Technology	* IBM * Pentium * Param

### Important Notes-

1. ENIAC - Electronic Numerical Integrator and Calculator/Computer
2. UNIVAC - UNIVersal Automatic Calculator
3. EDVAC - Electronic Discrete Variable Automatic Computers
4. EDSAC - Electronic Delay Storage Automatic Calculator
5. IBM - International Business Machine
6. FORTRAN - FORMula TRANslation
7. COBOL - Common Business Oriented Language
8. CDC - Consultancy Development Centre
9. NCR - National Cash Register Company
10. BASIC - Beginner's All-purpose Symbolic Instruction Code
11. ALGOL - Algorithmic Language
12. PDP - Programmed Data Processor
13. VLSI - Very Large Scale Integrator
14. DBASE - Distributed Bandwidth Allocation/Sharing/Extension
15. GUI - Graphical User Interface
16. DEC - Digital Equipment Corporation
17. CRAY - Completely Redundant Array of Yuppies
18. VAX - Virtual Address eXtension
19. ULSI - Ultra Large Scale Integrator