COMPUTER GENERATIONS

First Generation

→ 1942 – 1955

→ Electronic Numerical Integrated & Calculator [ENIAC]

→ Universal Automatic computer [UNIVAC]

→ called 1st generation.

→ computer programming in machine language.

→ used in → science
→ engineering

→ ENIAC → 200 microseconds → add 2 digit
→ 2800 microseconds → multiply

Limitations:
→ too bulky
→ air-conditioning
→ hardware failures.

Second Generation

→ 1955 – 1964

→ Germanium semiconductor material used.

→ 10 times faster

→ 10 times cheaper than vaccum tubes.

→ magnetic core used for storage.

→ High level languages → FORTRAN, COBAL, ALGOL, SNOBAL (developed)

Limitations:
→ air conditioning required
→ frequent maintenance needed.
→ costly.

Third Generation

→ 1964 – 1975

→ Germanium replaced by Silicon transistors.

→ based on IC's

→ contains 1000 transistors

→ High memory [100 megabytes]

→ online systems like
- airline reservation
- Data base management

→ Limitations:
- Air conditioning required
- need IC chips.

Fourth Generation

FIRST DECADE

→ 1975-1985
→ Large Scale Integrated circuits } Packed with 50,000 transistors in 1 chip.
→ Very Large Scale Integrated circuits }
→ Disk memory- 1000 Mbytes/drive.
→ Memory capacity/chip increased to 1K, 4K, 16K, 256K upto 1M bits
→ computer cost reduced → became common in → office → Home
→ Interactive graphic device, language Interface } to graphic system developed.
→ CAD Developed.

SECOND DECADE

→ 1986 - 1995
→ speed, size of memory } increased every year
→ 9.3 million transistors can carry billion operations/second.
→ Laptop develope in this decade[you]
→ Language C & C++ was popular.

Fifth Generation

→ 1996 onwards.
→ boundary b/w 4th & 5th generation still not clear.
→ more powerful microprocessor } in 1 chip
→ has more storage space. }
→ computer became → very fast, → reliable, → inexpensive
→ Design of → CPU, → memory, → I/O Device are not altered.