Generation of Computers

Generation of computers: An international conference in 1962, classified computers into 5 distinct classes based on the main electronic components used in the computers. These classes are namely called as the generation of computer.

First Generation

(1946-1958)

(Vacuum tube)

Features/characteristics:

i)   They used vacuum tubes as main electronic component.
ii) They were large in size, slow in processing & had small storage capacity.
iii) They consumed lots of electricity & produced excessive heat.
iv) They used machine level language for programming.

Examples:ENIAC, UNIVAC, IBM 650 etc.

Second Generation Computers

(1959-1964)

(Transistors)

Features/characteristics:

i)   They used transistors as their electronic component.
ii) Assembly language were used in this generation.
iii) This generation used 'Stored program concept'.
iv) Printers, tape storage, disk storage, memory were started from this generation.
v)   Processing speed improved to microseconds.

Examples: IBM 7030 stretch, IBM 1401, UNIVAC LARC etc.

Third Generation Computers

(1965-1974)

(Integrated Circuit/Microchip)

Features/characteristics:

i)   Third generation computers were based on integrated circuit technology.

ii)   Able to reduce computational time from microsecond to nanosecond.

iii) Used high level language for programming.

Examples: IBM 360, PDP-8, HP2115 etc.

Fourth Generation Computers

(1975- Present)

(Microprocessor)

<u>Features/Characteristics</u>:

i)   Used VLSI instead IC.
ii)   Size of computer reduces and speed of processing increased.
iii)   Support many useful other electronic devices.
iv)   Use very high level language for programming.

<u>Examples:</u> IBM PC, Apple-Macintosh etc.

Fifth Generation computers

In 1982 Japan started a project named Fifth Generation Computer System Project (FGCSP)

<u>Main features</u>:

i)   Give emphasize on artificial intelligence.
ii)   Will use super conductor technology –Gallium- Arsenide chip or biochips.
iii)   Quantum computation & nanotechnology.

©Written by: Nasim Ahmed

CSE-13 batch, CUET.

®Editor: Hasan

CSE-13 batch, CUET.

₴The End₴