Assignment-01

S.DORWIN
19221127

1) The apple macintosh, introduced in 1984, indeed had a significant impact on computer industry and was considered a game-changer for several reasons.

Graphical user Interface (GUI):-

The macintosh was one of the first computers to introduce a graphical user Interface, which revolutionized how users interacted with computers. It is user-friendly compared to earlier command-like interface.

WYSIWYG Editing:

- What you see is what you get.
- It allows users to see on the screen exactly how the printed output would look.
- This was a significant departure from earlier systems where users had to rely on:

- Desktop publishing capabilities:

The macintosh, combined with software like adobe page maker.

- Including advanced typography, graphics, page

2) Computers can be classified based on their functionality and computing power into several categories.

Supercomputers:-

Power:- Supercomputers are the most powerful computers available, capable of performing massive calculations.

Applications:-

It is used for scientific research, weather forecasting, molecular modeling, climate studies, etc.

Mainframe Computers:-

Power:- Mainforms are powerful computers designed to large scale data processing and support multiple users.

Applications:-

Used in industries such as banking, finance, healthcare, and government for task like transaction processing, data storage, data analysis.

Minicomputers & Microcomputers:-

Power:- Minicomputers have moderate computing pow falling between mainframes & personal computers.

Microcomputers, also known as personal computers are design for individual use and provide a wide range of computing.

3) Control unit (CU) :-

• The control unit manages and coordinates the activities of the CPU.

• It interprets and decodes instructions, determines the sequence of operations & controls data flow between different CPU components.

• Arithmetic Logic unit (ALU) :-

• The ALU performs arithmetic operations & logical operations on data.

• It operates on binary data, manipulating bits & performing calculations based on the instructions provided by the control unit.

• Registers :-

• Registers are small, high speed memory locations used for temporary storage within the CPU.

• They hold data, instructions & intermediate result.

Cache memory :-

• Cache memory is a small but fast memory located within the CPU.

• It stores frequently accessed data & instructions to reduce the time needed to access information from the main memory.