**Computer Architecture**

Processor: The processor is the central processing unit (CPU) of a computer that carries out the instructions of a program and manages the system resources.

Memory: Memory refers to the storage location where data and instructions are stored temporarily during the execution of a program. It includes primary memory like Random Access Memory (RAM) and secondary memory like hard disk.

Cache: Cache is a high-speed memory that stores frequently used data for quick access, thereby reducing the number of memory accesses.

Bus: A bus is a communication system that transfers data between different components of a computer, such as the processor, memory, and I/O devices.

Registers: Registers are high-speed memory locations within the processor that hold frequently accessed data and instructions.

Instruction set: An instruction set is a collection of instructions that a processor can execute.

Control unit: The control unit is responsible for managing the execution of instructions and the flow of data within the processor.

Arithmetic logic unit (ALU): The ALU is responsible for performing arithmetic and logical operations within the processor.

Input/output (I/O): I/O refers to the communication between a computer and external devices, such as a keyboard, mouse, printer, or scanner.

Interrupt: An interrupt is a signal sent to the processor to temporarily halt the execution of a program and handle a specific event, such as a keystroke or mouse click.

Clock cycle: A clock cycle is a unit of time used to synchronize the operations of a computer's components, such as the processor and memory.

Pipeline: A pipeline is a technique used to improve the performance of a processor by breaking down instructions into smaller tasks and executing them in paralle

Address space: Address space refers to the range of memory locations that a processor can access.

Endianness: Endianness refers to the way a processor stores data in memory, either in a big-endian or little-endian format.

Virtual memory: Virtual memory is a technique used to extend the available memory by using a portion of the hard disk as additional memory.

Power consumption: Power consumption refers to the amount of power used by a computer system, including the processor, memory, and other components.

Multiprocessing: Multiprocessing refers to the use of multiple processors or cores to perform multiple tasks simultaneously.

System bus: The system bus is a communication system that connects the processor, memory, and I/O devices.

System clock: The system clock is a signal generated by the processor to synchronize the operations of a computer's components.

Pipeline hazards: Pipeline hazards refer to situations that can occur when executing instructions in a pipeline, such as data hazards, control hazards, and structural hazards.