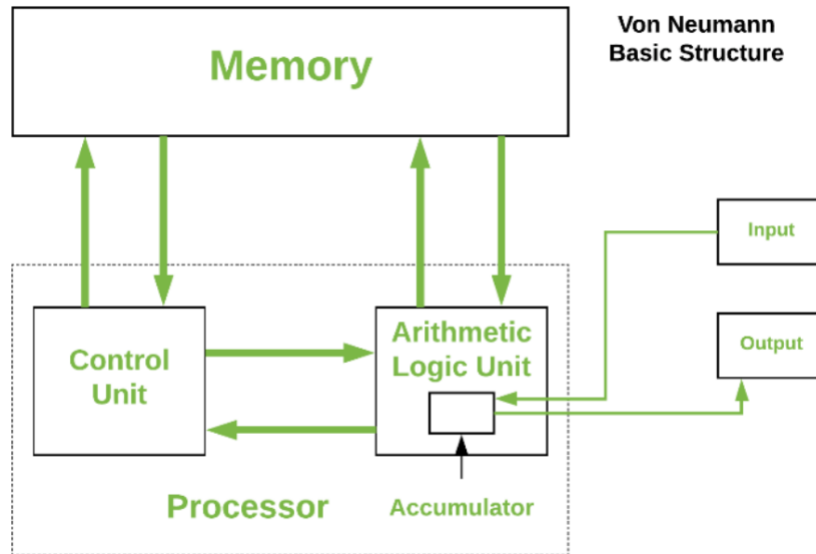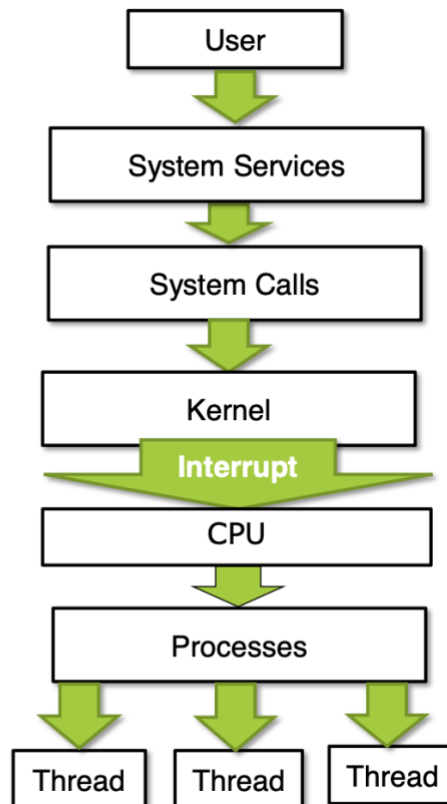Test # 1

Jiading Zhou, Jan 28th, 2025

- List Cloud Computing Services?
  - Private Cloud (On-premises)
  - Infrastructure as a Service,
  - Platform as a Service,
  - Function as a Service (Serverless),
  - Software as a Service.

- Computer system can be divided into four components, list them?
  - Hardware, Operating System, Application Programs, Users

- What is VUI?
  - VUI stands for Voice User Interface.

- What is an Interrupt ?
  - Interrupt is the mechanism by which modules like I/O or memory may interrupt the normal processing by CPU. It may be either clicking a mouse, dragging a cursor, printing a document, etc the case where interrupt is getting generated.

- List one advantage of Interrupt?
  - Interrupt increases the efficiency of CPU.

- List types of cloud computing?
  - Public cloud, Private cloud, and Hybrid cloud

- Explain Von Neumann architecture (you can use a diagram to explain it)?
  - Von Neumann architecture contains Memory, Input and Output, Processor (which includes Control Unit, Arithmetic Logic Unit, and Accumulator).

Von Neumann Basic Structure

- List the components of Big Picture of OS?
  - User -> System Services -> System Calls -> Kernel -> (Interrupt) -> CPU -> Processes -> Threads

The Big Pic of OS

- List the factors in Storage systems hierarchy?
  - Speed, Cost, Volatility

- What is Polling?
  - Polling is not a hardware mechanism, its a protocol in which CPU steadily checks whether the device needs attention. Wherever device tells process unit that it desires hardware processing, in polling process unit keeps asking the I/O device whether or not it desires CPU processing.