Module 1

▼ Define an OS.

a program that controls the execution of application programs on a computer, and acts as an interface between applications and the computer hardware

▼ What does an OS manage?

the computer's memory and processes in addition to its software and hardware

▼ What does the processor control?

the operation of the computer

▼ What does main memory store?

data and programs

▼ What do input/output modules move?

data between the computer and its external environment

▼ What does the system bus provide for?

communication among the processor, main memory and I/O modules

▼ What did computers w/o an OS require programmers to use?

machine language, with the help of switches or punch cards to specify commands for execution

▼ What was the earliest version of an OS?

a batch system - to schedule processes and reduce errors

▼ What are the main categories of OS?

- Unix/Linux

- Windows

- Mac/iOS

- Android

▼ What is the purpose of process management?

to run programs and applications efficiently, avoiding conflicts

▼ What is the purpose of storage and memory management?

to allocate and deallocate memory space to the processes that need resources

▼ What is the purpose of disk management?

to manage files systems and file system device drivers

▼ What is the purpose of security management?

to protect information and confidential data stored in the system

▼ What is the purpose of I/O operations?

to handle the complex interfaces between the user and the computer hardware

▼ What is the purpose of loading and execution?

to start and load the computer, then load programs to be run into memory

▼ Pros of Linux OS?

- the power and control over the programming environment that comes with a UNIX-based OS

- a usable GUI

- the availability of free of charge, platform-independent, up-to-date installation packages