

11 Lecture - CS101

Important Subjective

1. **What is an operating system?**

Answer: An operating system is a software program that manages computer hardware and software resources and provides services to computer programs.

2. **What is a process in the context of an operating system?**

Answer: A process is a program in execution, which includes the current values of the program counter, registers, and variables.

3. **What is a file system in the context of an operating system?**

Answer: A file system is a way of organizing and storing files on a computer. It includes directories, files, and metadata.

4. **What is a shell in the context of an operating system?**

Answer: A shell is a program that provides a command-line interface for interacting with the operating system.

5. **What is virtual memory in the context of an operating system?**

Answer: Virtual memory is a technique that allows a computer to use more memory than it physically has by using the hard drive as a backup storage for unused memory.

6. **What is a device driver in the context of an operating system?**

Answer: A device driver is a program that allows the operating system to communicate with hardware devices, such as printers and scanners.

7. **What is a context switch in the context of an operating system?**

Answer: A context switch is a process of saving the state of the current process and restoring the state of another process to allow multiple processes to run concurrently.

8. **What is scheduling in the context of an operating system?**

Answer: Scheduling is the process of determining which process will run on the CPU at any given time.

9. **What is a system call in the context of an operating system?**

Answer: A system call is a request made by a user program to the operating system to perform a specific task, such as reading or writing a file.

10. **What is a kernel in the context of an operating system?**

Answer: The kernel is the core component of the operating system that manages system resources and provides services to applications.