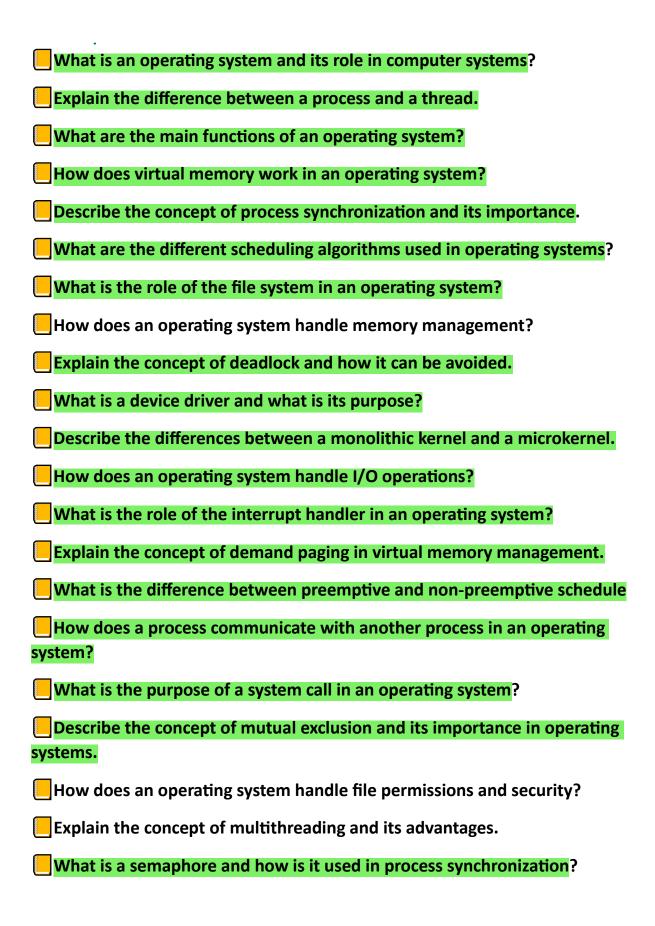
## **OPERATING SYSTEM**



Describe the role of the process scheduler in an operating system.
How does an operating system handle input and output devices?
Explain the concept of virtualization and its benefits.
What is a context switch and when does it occur?
Describe the role of the cache in an operating system.
How does an operating system handle page faults?
What is the purpose of a command interpreter or shell in an operating system?
Explain the concept of I/O buffering and its advantages.
What is the role of the memory manager in an operating system?
How does an operating system handle inter-process communication?
Describe the concept of process creation and termination.
What is a race condition and how can it be avoided in operating systems?
How does an operating system handle interrupts?
Explain the concept of spooling in an operating system.
What is the difference between a real-time operating system and a general-purpose operating system?
Describe the role of the page table in virtual memory management.
How does an operating system handle file system fragmentation?
Explain the concept of thrashing and its impact on system performance.
What is the purpose of a bootloader in an operating system?