# Tutorial-2

1. How can an operating system be viewed as an event-driven application?
2. Discuss operating system architecture. How monolithic architecture is different from layered architecture?
3. Explain the difference between *user mode* and *supervisor mode* and explain why modern CPUs include the capability to run in either of these modes.
4. Define three styles of switching from user mode to supervisor mode.
5. What distinguishes *system calls* (such as write) from *library functions* (such as printf)?
6. What is the primary difference between a kernel-level context switch between processes (address spaces) and a user-level context switch?
7. What is the purpose of the command interpreter? Why is it usually separate from the kernel?
8. What is the relationship between a guest operating system and a host operating system in a system like VMware? What factors need to be considered in choosing the host operating system?
9. What is Direct Memory Access? How is it important in the operating system?
10. Explain the steps that an operating system goes through when the CPU receives an interrupt.
11. Differentiate Interrupts, Exceptions, and System Calls.