

Q1 Dual Modes of OS:-

OS is divided into two modes:

- 1) Kernel Mode / Monitor Mode / Supervisor Mode
- 2) User Mode

- Kernel Mode:- Kernel mode allows OS to read data from I/O devices but prevent user program from reading it directly. To perform hardware based operations OS internally changes its way from user mode to monitor mode.

- User Mode:- User Mode is the initial mode of system. No hardware based instructions are executed in this mode. like delete partition, create/copy file. All execution is done on the behalf of a user.

ROLE OF SYSTEM CALL IN DUAL MODE:-

System calls help us to switch between two modes. It basically calls OS to get desired functionality/hardware privileged instructions at a higher level. Like function which calls OS functionality e.g. open command. In short, whenever we use system call, control transfers from user mode to kernel mode. So that we can access hardware and can create/delete a process, do memory management, ^{do} file management etc.

