

# OPERATING SYSTEM

## ASSIGNMENT-1

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1) What is system call? Discuss the types of system call

- System call
- programming interface to the services provided by OS
  - Typically written in high level language.
  - Most accessed by program via a high level API rather than direct system call use.
  - System call names used through put this are generic

### Types of system calls

General system call are classified into 6 types

They are

#### 1. process control

- create system terminate process
- end, abort
- load, execute
- Debugger for determining bugs, single step execution
- Locks for managing access to stored data.

#### 2. File management

- create file, delete file
- open, close file
- Read, write, reposition
- get and set file attributes

#### 3. Device management

- Request device, Release device
- Read write Reposition
- Logically attach (or) detach devices

#### 4) information maintenance

- get time (or) data, set time (or) data
- get system data, set system data.
- get and set process, file (or) device attributes

#### 5) communications

- create, delete communication connection
- send, receive message.

#### 6) protection

- control access to resource
- get and set permission.

#### a) List briefly describe types of operating system?

most system use a single general-purpose processor

most system have special-purpose processor as well

#### Types of operating system

There are several types of operating system They are

- Batch operation system
- multi programming language
- multi tasking
- time sharing OS
- Distribution OS
- network OS
- Real time OS

Batch operating system :- This type of OS does not interact with the computer directly It is the responsibility of the operator to sort jobs with similar needs

Ex:- payroll system, Bank statement etc

## multi processing operating system

It is a type of operating system in which more than one CPU is used for the executive of resource

## multi tasking operating system

It is simply a multiprogramming operating system with having facility of a Round Robin scheduling Algorithm. It can run multiple programs simultaneously.

## Time sharing operating system

Each time is given sometime to execute so that all the task smoothly there as are called multi tasking operating system.

TS or time sharing option

It was 1<sup>st</sup> introduced in 1972 window terminal services