Assignment 1

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Fill the Blanks

1. System S/w
2. Multitasking OS
3. System call
4. Process control Block
5. OS Management

Short Q's

1. It allows us to create a system as large and complex as an OS system by partioning it into smaller pieces.

some services :-

i) Process Management
ii) Main Memory "
iii) File "
iv) I/O System "
v) Secondary Management
vi) Networking
vii) Protection System
viii) Command. Interpreter System.

2. VM is a computer software that uses S/w instead of a physical computer to run programs and deploy apps.

(3) A System Call is the ~~programatic~~ programatic way in which a computer program requests a services from the kernel of the OS.

(4) ~~Here~~ There are 5 states in process life cycle

(i) New
(ii) Running
(iii) Waiting
(iv) Ready
(v) Terminated

(5) A buffer is a memory area that stores data being transferred b/w 2 devices / between a device and an application.

types of buffering

(i) Single ~~Buffer~~ Buffer

(a) Block Oriented device
(b) Stream oriented device

(ii) Double Buffer

(a) Block oriented
(b) Stream Oriented

(iii) Circular buffer

Long Q's

① A thread is a basic unit of CPU utilization.
A thread, sometimes called as light weight process whereas a process is heavyweight process.

→ A process is a program that performs a single thread of execution.

Multithreading

→ Allows different parts of a single prog. to run concurrently.

→ Some OS provide a ~~ther~~ User level and kernel level threads facility

→ 3 common ways to establish this relationship are.

(i) Many to One model

→ maps many user-level threads to one kernel thread.

(ii) One to One model

→ Maps each user thread to a kernel thread.

(iii) Many to Many Model

→ Maps many user level ~~the~~ threads to a smaller (or equal no. of kernel threads.