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Course: CSE - 231 (Operating System Concept)

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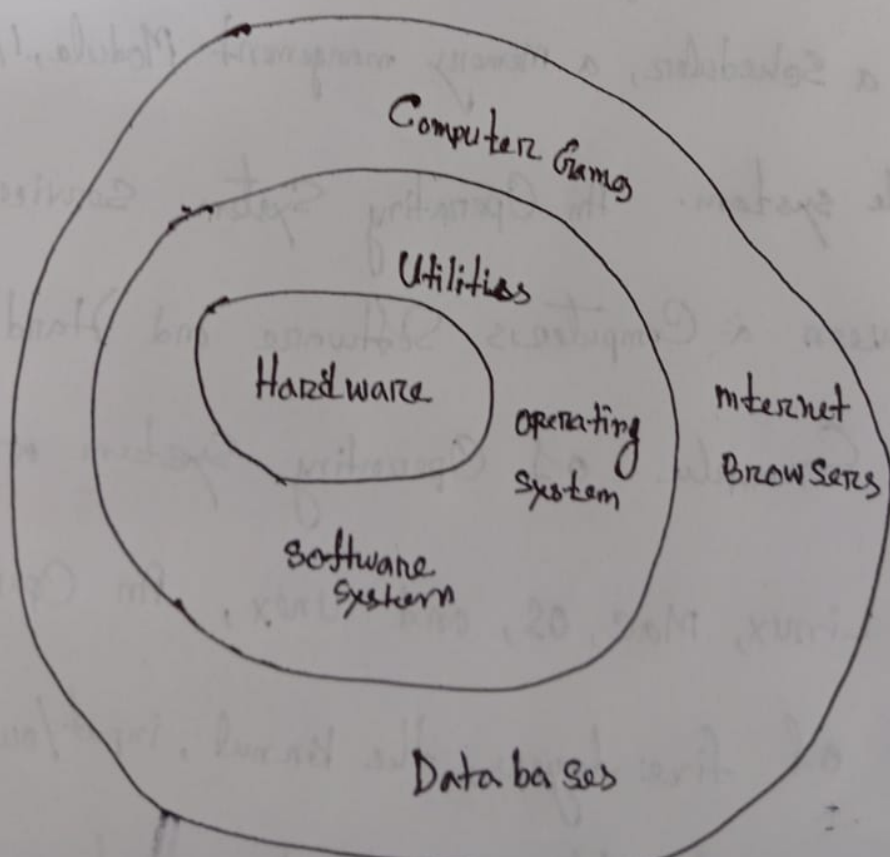
Answer to the Question No-1.

□ Basic Concept Operating System: An Operating System with the Allocation of resources and Service, such as Memory, processors, Devices, and information. The Operating System Correspondingly. Includes programs to manage these resources, such as a traffic Controller, a Scheduler, a memory management Module, I/O programs and a file system. An Operating System service as a Linker between a Computer's Software and Hardware. Typical Example of Operating System are Windows, Linux, Mac, OS, and Unix, An Operating is composed of five layers, the kernel, input/output, Memory management file management system and user interface.

(iii) Operating System Definition and function:

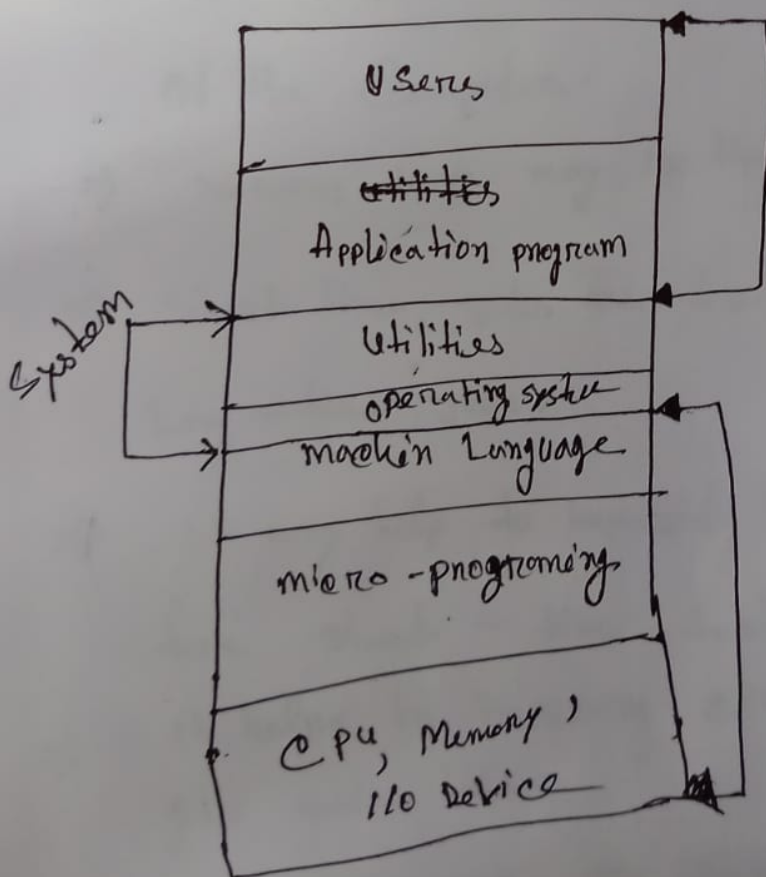
⇒ In the Computer system (comprises of Hardware and software), Hardware can only understand machine code (in the form of 0 and 1) which doesn't make any sense to a naive user.

We need a system which can act as an ~~inter~~ intermediary and manage all the processes and resources present in the system.



An operating system can be defined as an interface between user and hardware. It is responsible for the execution of all processes. Resource Allocation, CPU management, File management and many others tasks.

The purpose of an operating system is to provide an environment in which a user can execute programs in convenient and efficient manner.



Answer to the Question No - 2

There are various advantages and Disadvantages of the multiprogramming Operating system. Some of the Advantages and disadvantages are as follows:—

Advantages:

- ⇒ It provides less response time.
- ⇒ It may help to run various jobs in a single application simultaneously.
- ⇒ It helps to Optimize the total job throughput of the Computer.
- ⇒ Various users may use the multiprogramming system at once.
- ⇒ Short time jobs are done quickly in Comparison to Long-time jobs.
- ⇒ It may help to improve turnaround time for short-time tasks.
- ⇒ It helps in improving CPU utilization and never lets it idle.

Disadvantages Operating System.

- ⇒ It is highly complicated and sophisticated.
- ⇒ The CPU scheduling is required.
- ⇒ Memory Management is needed in the Operating System because all types of tasks are stored in the main memory.
- ⇒ The harder task is to handle all processes and tasks.
- ⇒ If it has a large number of jobs, then long time term jobs will require a long wait.

→ X →

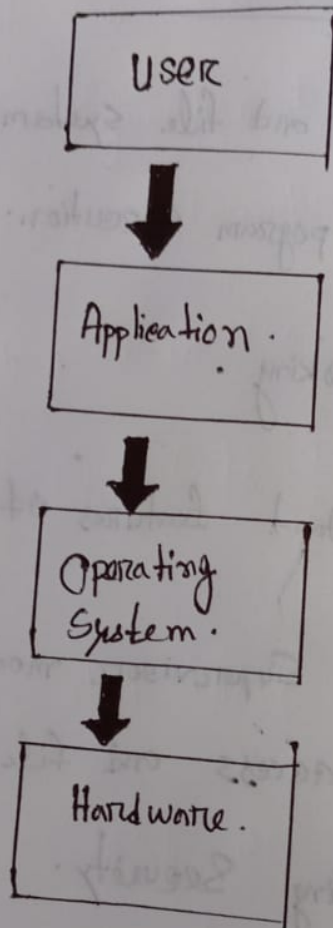
Answer to the Question No-3

Q) Features of operating system: (OS)

Allows disk access and file system Device driver.
Networking Security. program Execution. Memory management
Virtual Memory Multitasking.

⇒ Here is list important features of OS:

- ⇒ protected and Supervisor mode.
- allows disk access and file system Device Drivers Networking Security.
- program Execution.
- Memory management Virtual Memory Multitasking.
- Handling I/O operations.
- Manipulation of the file system.
- Error Detection and handling.
- Resource allocation.
- Information and Resource protection.

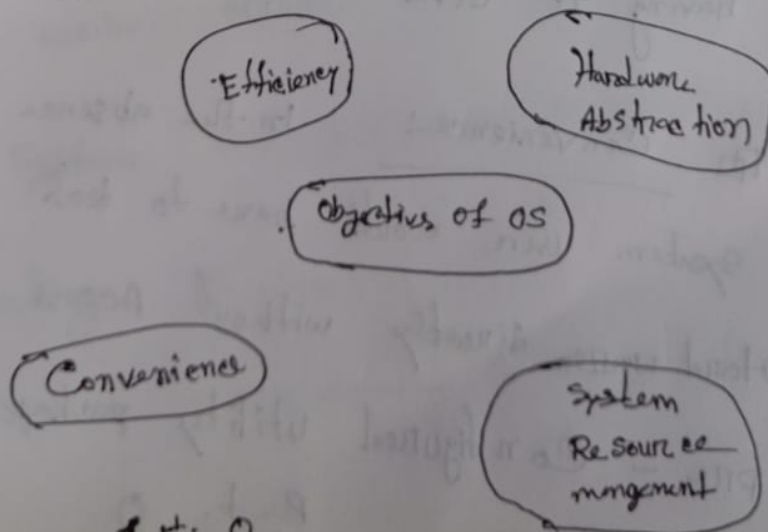


a feature operating system

Q1 Objects Operating System: The operating system acts as a bridge between the user of a Computer System and the Computer hardware. All of the Applications required for your programs to utilize the Computer Hardware are located on top of the Operating System.

⇒ The following are the main objects of of Operating system —

- (i) Efficiency -
- (ii) Hardware abstraction.
- (iii) Convenience.
- (iv) System Resource management.



▣ Efficiency: The operating system increases the production efficiency. This is because the System Configuration takes less time. By default the Operating system handle system takes such as allocating resource to processes, processes and Resolving Conflicts between different program and users.

▣ Hard ware abstractions: The operating system performs a good job of concealing the Computers intricate details. The user can fully utilizes the Computer Hardware without having to cope with the accompanying difficult.

▣ Convenience: In the absence of an operating system user would have to deal with the Hard ware directly without Access to the pre - Configured utility packages.

The Come with an operating system. This would make using a computer extremely inconvenient. operating system allow users to go right to work on the tasks they want to do without dealing with the burden of setting up the system beforehand.

III System resource management: The operating

System serves as a neutral. It serves a management role in the computer system by ensuring equitable resource distribution among various operation and consumers.

So far we've discussed the objectives of the operating system. let's go over the function of operating system.

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