ID :- 12990
Semester :- 8th

Q1 Explain the main purpose of an operating system.?

Ans The operating system serves many purposes Talking at high level operating system can be considered as a translator between user and computer (CPU). CPU and computer can understand only 0s and 1s but the program that we use today is written in some high level language like C or java or something else. Now these program ultimately had to be changed to 0s and 1s order to execute This is the responsibility of operating system. An operating System is a system software that is executed when the computer is turned on so that it can act as an inter face between humans and the machine. A hardware or machine is not understand by humans so to understand the operating system is required. the main responsibity are.

(1) it manages hardware parts of a computer like keyboard, mouse, processor, memory etc.
(2) it manages resources like printer, scanner, projector e.t.c.

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Q2] What are the advantages of a multiprocessor System?

Ans] The advantages of the multiprocessing System are: Increased by the increasing number of processors more work can be completed in a unit time.
Cost saving - parallel system shares the memory, buses, peripherals etc

(1) increased Throughput: By increasing the number of processors, more work can be completed in less time.
(2) Ecomomy of scale :- As evidenced by the increased throughput when production goes up. so do profit.
(3) increased relebility :-
As the workload is distributed evenly between the different processors it becomes more accurate.

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Q3] Describe the objective of Multiprogramming?

Ans] The main objective of the multiprogramming is to have process running at all the times. with the design, CPU utilization is said to be maximized. multiprogramming is a Feature of the operating system with the help of it can run multiple programs at the same time.

Q4] Give some benifits of multithreaded Proframming?

Ans] ★ Improved throughput
★: Simulteneous and fully symmetric use of multiple processors for computation and I/O
★: Superior application responsivness.
★:- Improved Server responsiveness
★: Minimized system resource usage.
★: program structure simplifaction
★: better communication.

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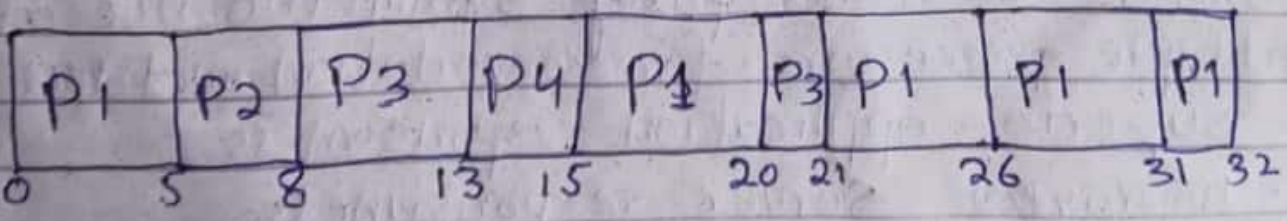
Q5] what is RR Scheduling algorithm? 5

Ans] Round-robin is one of the Algorithms employed by process and network Schedulers in computing. As the term is generally used, time slices are assigned to each process in equal portions and in circular order, handling all processes without priority.

process	Burst time
P1	21
P2	3
P3	6
P4	2

The GANTT chart for round robin Scheduling will be.



The average waiting time will be 11 ms.

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Q6) what are the primary difference between Network operating system and distributed operating system?

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Ans) A network operating system is made up of software and associated protocols that allow a set of computer network to be used together.
A distributed operating system is an ordinary centralized operating system but runs on multiple independent CPUs.

The main differences between network operating system and distributed operating system provide network related Functionalities while a distributed operating system Connects multiple independent computer via a network to perform task similar to a single computer.

Network operating system	Distrubeted operating system
Helps to manage data users, groups, security and other network related Functinalities Ex: Artisoft's LANtastic and Microsoft LAN Manger	Helps to share resources and collaborate via a shared network to accomplish tasks. Ex LOCUS and MICROS.

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Q) What inconvinces that a user can Face while interacting with a computer System, which is without an operating System.

Ans 7 operating System is a required component of the computer System. without an operating System computer hardware is only an inactive electronic device or machine. which is inconvenient to user for execution of programs. As the computer hardware or machine understand only machine language

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