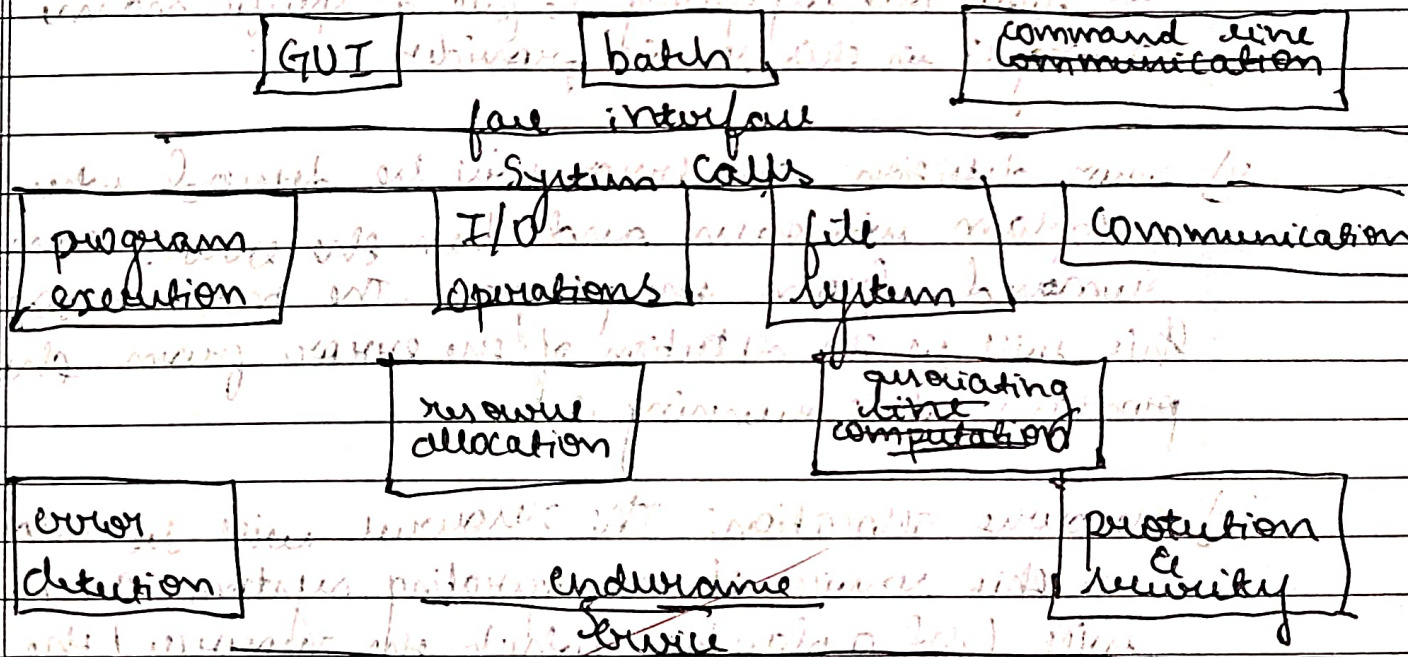


- i) Operating system means where the storage of the operating systems are placed in the computer where the types can be used for the function of the items.



Operating system Services of operating system

- i) Program execution: The program execution means where the programs which we will write will be executed in the end of the program.
- ii) I/O operations: The I/O operations will be carried out in the service of operating system such as keyboards, printers and device.
- iii) Communication: The communication is used in the

operating system where the signals will be carried out in the system. The signals can be tracked by the communication.

iv) file system: The file system is used where the files will be stored in this service provider. The files can be taken out by giving the file a specific name and saving it in this service provider.

v) error detection: The error will be detected when the program will run and then the errors can be removed from the program. The main reason for this will be the detection of the errors from the program while running it.

vi) resource allocation: The resource will be allocated in this service of the operating system. The resource will find a place in which the resource / the files can be allocated.

vii) Protection and security: The user will have to use the service of the operating system where the system will be protected and the files can be stored safely by using this. It will be more safely secured.

viii) associating: The associating can be done by when the association of the operating system will be associated with the server of the whole block.

ix) Operating system - This is the main thing where the system will be rooted and this service will help in the operating of the system.

2)

b)

i) Multi-processor system

* The Multi-processor system will help in the ~~not~~ accommodation of more time will be taken in this.

~~Multi-processor system~~

* Multi-clustered system the accommodation will be taken in less time integrating several machines in one time.

* The multi-processor system

* The processor is slower as this is a single processor which runs.

* Multi-processor system can be single entity consisting of the a multi-processor.

* In multi-processor only the system will work require the output of the processor

* The advantage of multiprogramming is increase through put

* The clustered system will remove the

Hardware clusters will be used in the making of the systems of the multi-clustered systems.

* The Hardware clusters will reduce the performance risk in the cluster.

* The cluster clusters make both the systems work together as the Hardware part also.

* Two types of clusters:

- a) Synchronous
- b) Asynchronous

ii) Multi-programming
 * In this the programs can be done in 2 or more times at a single device.

Multi-tasking
 * In this the tasking of the device can be done together at a same time is known as multi-tasking.

* The ~~program~~ ^{signal} is slower as the ~~program~~ ^{signal} resides in the temporary memory while execution.

* Multi-tasking uses as follows the concept of the context sensitivity.

* It is not a time saving task as the time required for multi programming is more.

* It is time saving as the task resigned regularly.

* Jobs are subset of Jobspool.

* The user gives the input via Keyboard or more.

3)

a) Inter process communication means the process in which the memory will be carried in the form of signals will be interrupted and will can add or remove that signals this is called as inter process communication.

Message passing

i) In this the message will be passed on from one to another.

ii) The message which is passed can be opened by giving the message a specific name.

Shared memory

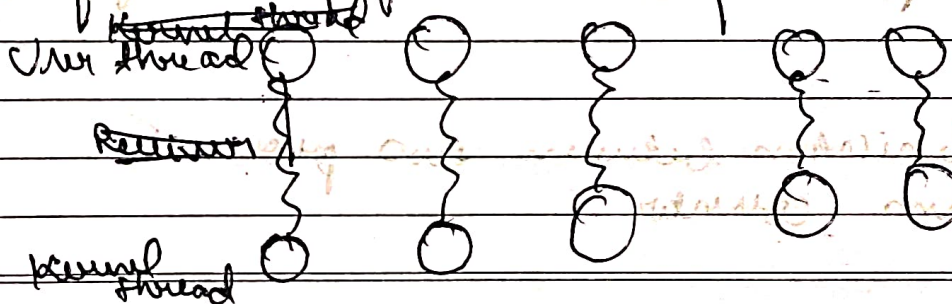
i) In this the memory will be shared from one device to another.

ii) In shared memory cannot be opened by the user cannot be the memory.

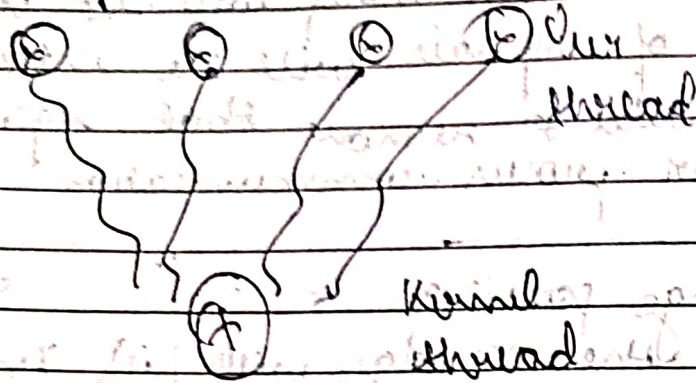
3)

- b) i) Many to many
- ii) Many to one
- iii) One to one

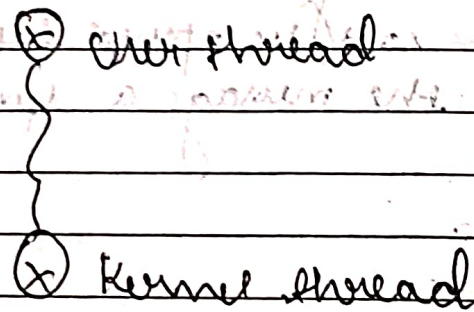
i) Many to many can be used in the threading of sending from many to many.



ii) Many to one in which the thread can be sent from many user threads to one Kernel thread



iii) One to one in which the thread can be sent from one user thread to one Kernel thread



Quiz:-

- 1) a) fork.
- 2) a) when process is scheduled to run after some execution
- 3) b) communication between two processes
- 4) b) Program counter
- 5) d) 7