## **Unit – 2**

IPC

* Inter-Process Communication (IPC) refers to the mechanisms and techniques used by processes (or threads) to communicate and synchronize with each other in a multi-process or multi-threaded environment within an operating system.
* IPC allows processes to exchange data, share resources, and coordinate their activities to achieve common goals.

Process A

Process B

Exchanging data

Process Synchronization

* Process synchronization is a mechanism to ensure a systematic sharing of resource among concurrent processes.
* Two or more processes should not come in to each other’s way, also proper sequencing should be maintained while executing cooperating processes.

Race Condition