

object can exist either in triggered or non-triggered state. Triggered state indicates resumption of the task.

b) b) Semaphores :A semaphore functions like a key that define whether a task has the access to the resource. A task gets an access to the resource when it acquires the semaphore. A semaphore has an associated resource count and a wait queue. The resource count indicates availability of resource. The wait queue manages the tasks waiting for resources from the semaphore. There are three types of semaphore:

- Binary Semaphores
- Counting Semaphores
- Mutually Exclusion(Mutex) Semaphores

Difference between RTOS & general OS(any three)

Sr. No.	Desktop OS	RTOS
1.	Applications are compiled separately from the OS.	Applications are compiled and linked together with the RTOS.
2.	As you turn on your desktop, only OS starts.	At boot up time, application usually gets controlled first and then it starts the RTOS.
3.	It is a less reliable system	It is a more reliable system
4.	It is not able to customize dependency on applications.	It is able to customize dependency on applications.
5.	It does not have deterministic response.	It has deterministic response.
6.	Memory required depends on the version.	Memory required (footprint) is very less.
7.	It protects itself very carefully from applications.	It does not protect itself as carefully from applications.
8.	e.g. Windows, Linux.	e.g. RT Linux, Vx Works.

What is intertask communication

Intertask/Inter process communication is the set of techniques for exchanging the data among multiple threads in one or more processes. Inter process communication techniques are divided into