

## CPU Scheduling Algorithms

### Objective

To schedule the processes using Round Robin scheduling algorithm.

### Description

In Priority scheduling algorithm, the processes in the ready queue are given a fixed time slot for their execution, called the **quantum**, in a cyclic way. Once a process is executed for a given time period, it is preempted, and other process executes for a given time period, hence is a preemptive scheduling algorithm. It is one of the most commonly used techniques in CPU scheduling as a core. Round Robin scheduling algorithm is starvation-free as all the processes in the ready queue get fair share of CPU. The states of the preempted process are saved using context switch.

### Quiz Task

Suppose there are five processes in the ready queue with different arrival times and burst times.

Process ID	Arrival Time	Burst Time
Pid_0	2	6
Pid_1	5	2
Pid_2	1	8
Pid_3	0	3
Pid_4	4	4

Schedule the processes using Round Robin Scheduling technique. Calculate the waiting time, turn-around time, average waiting time and average turn-around time for the above set of processes in the ready queue.