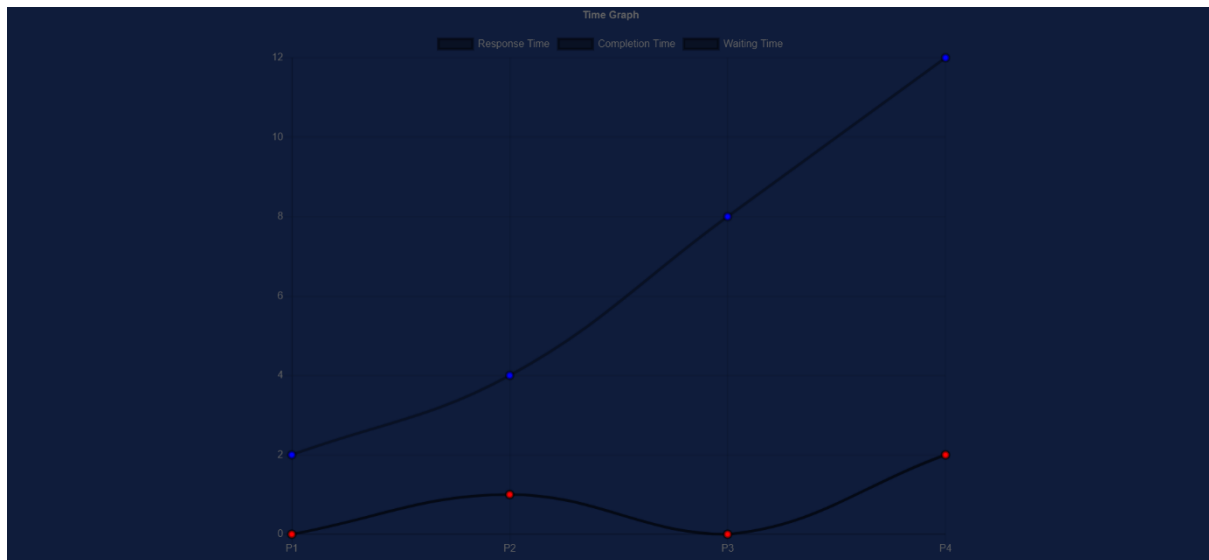


# Process Scheduling Algorithms:

- **FCFS( First Come First Serve):** FCFS algo. is a non-preemptive algorithm and it execute processes according to its arrival time(process that comes first in the ready queue). FCFS also suffers from starvation which arise if the first process has larger burst time.

Example:

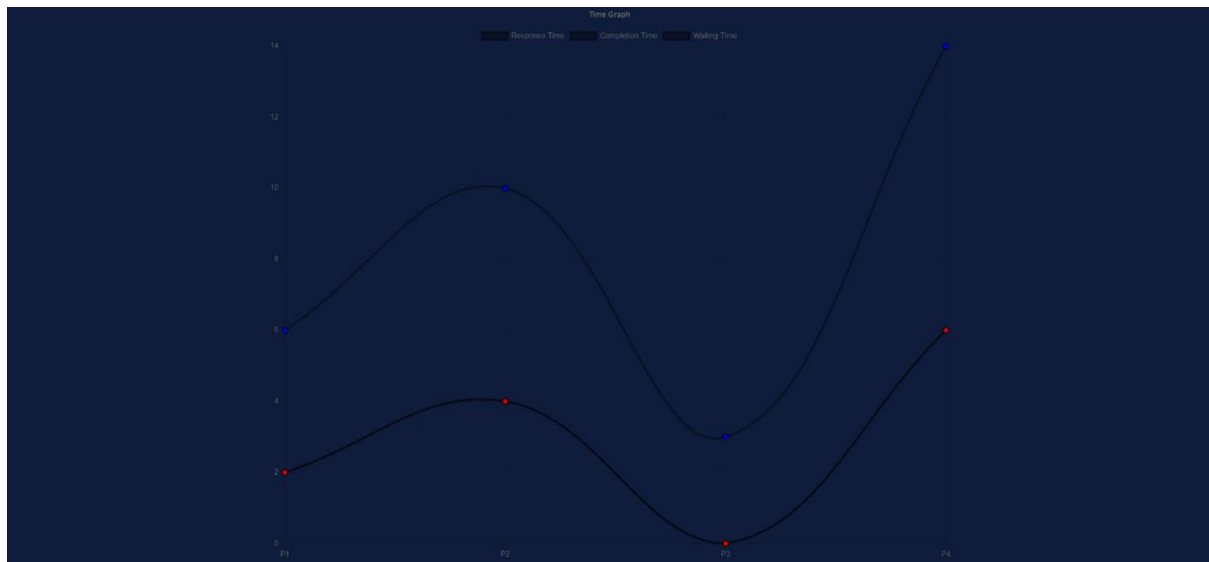




- **SJF(Shortest Job First):** SJF algo. is a non-preemptive algorithm in which the process having shortest /smallest burst time is executed first. It significantly reduces the average waiting time for other processes awaiting execution.

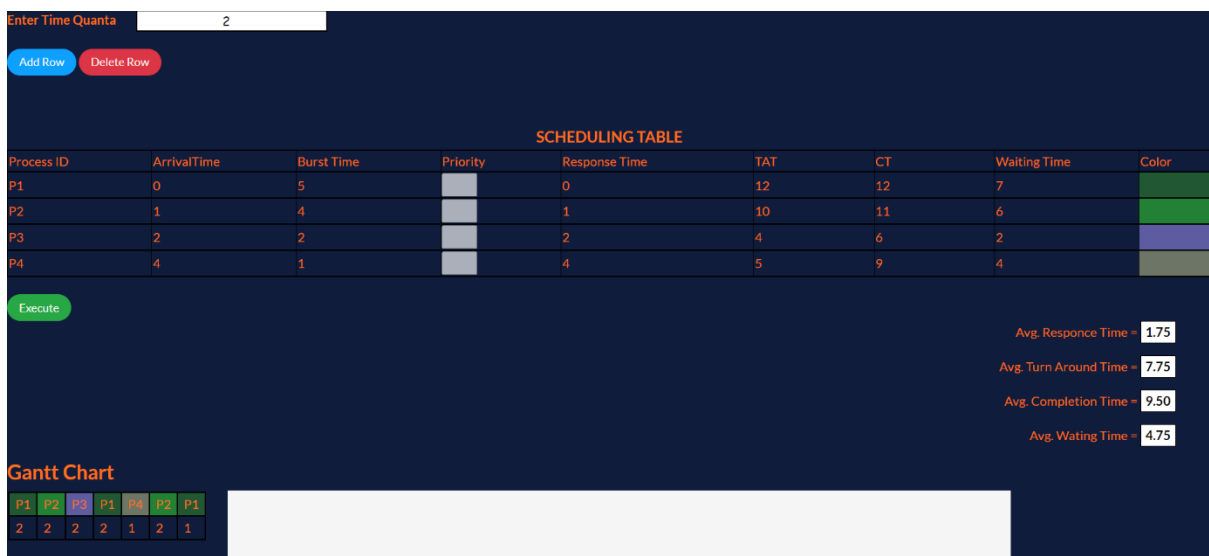
Example:

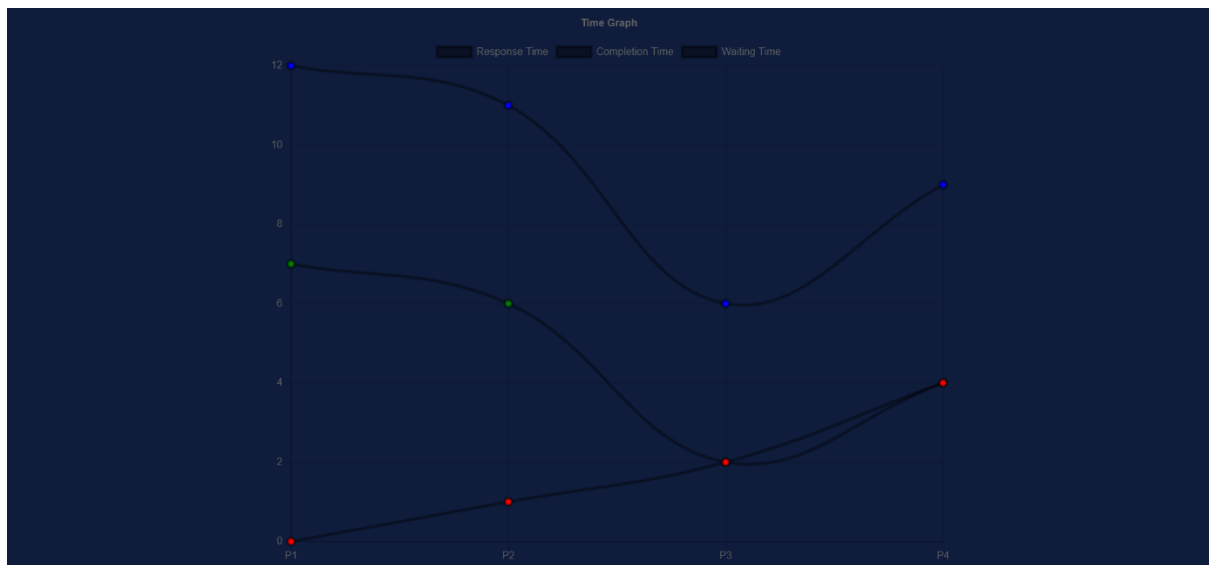




- **Round Robin:** Round robin is a pre-emptive algorithm. The process that is preempted is added to the end of the queue. This algorithm also offers starvation free execution of processes.

Examples:





- **Priority:** It is a non-preemptive algorithm. In this algo if the new process arrived at the ready queue has a higher priority than the currently running process, the CPU is preempted, which means the processing of the current process is stopped and the incoming new process with higher priority gets the CPU for its execution.

Example:

SCHEDULING TABLE								
Process ID	ArrivalTime	Burst Time	Priority	Response Time	TAT	CT	Waiting Time	Color
P1	0	5	30	0	5	5	0	
P2	1	4	20	5	9	10	5	
P3	2	2	40	8	10	12	8	
P4	4	1	10	1	2	6	1	

Execute

Avg. Response Time = 3.50

Avg. Turn Around Time = 6.50

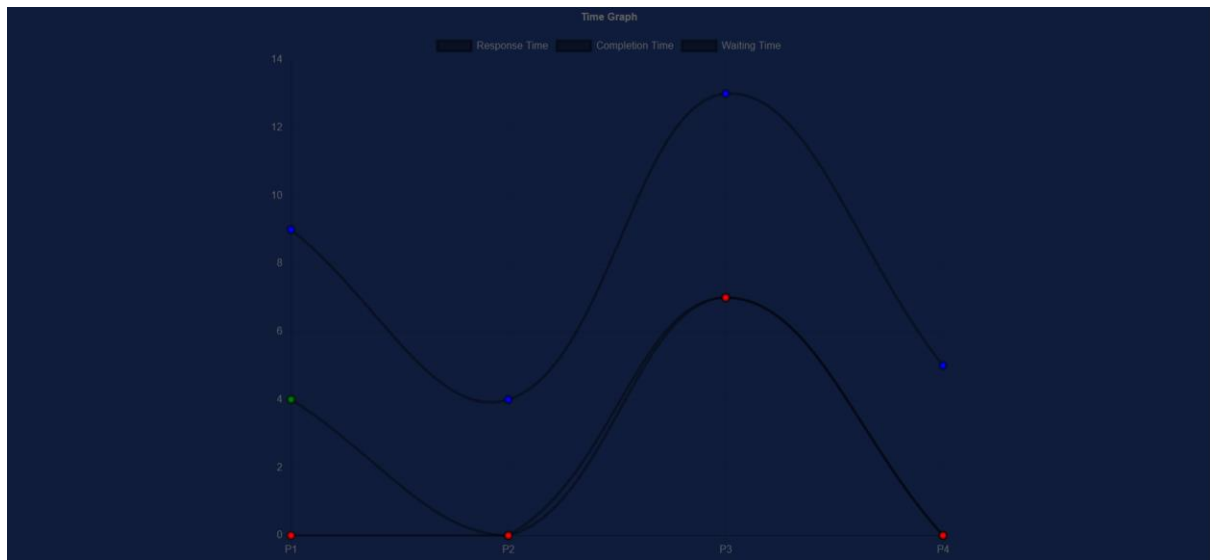
Avg. Completion Time = 8.25

Avg. Waiting Time = 3.50

**Gantt Chart**

P1	P4	P2	P3
5	1	4	2





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