

Round-Robin CPU Scheduling

R. Abhinav

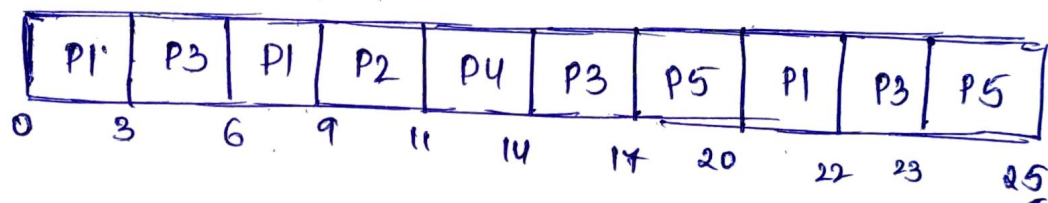
let us take;

Process	Arrival Time	Burst time
P1	0	8
P2	5	2
P3	1	7
P4	6	3
P5	8	5

Ready Queue:-

P1, P3, P1, P2, P4, P3, P5, P1, P3, P5

Gantt Chart:-



Completion Time for;

$$P1 = 22$$

$$P2 = 11$$

$$P3 = 23$$

$$P4 = 14$$

$$P5 = 25$$

Turn around Time for: $P1 = \text{Completion Time} - \text{Arrival} =$

$$P1 = 22 - 0 = 22$$

$$P2 = 11 - 5 = 6$$

$$P3 = 23 - 1 = 22$$

$$P4 = 14 - 6 = 8$$

$$P5 = 25 - 8 = 17$$

Waiting Time for, $P1 = \text{Turn around Time} - \text{Burst time}$

$$\Rightarrow P1 = 22 - 8 = 14$$

$$P2 = 6 - 2 = 4$$

$$P3 = 22 - 7 = 15$$

$$P4 = 8 - 3 = 5$$

$$P5 = 17 - 5 = 12$$

$$\text{Average waiting Time} = \frac{(14 + 4 + 15 + 5 + 12)}{5}$$

$$= \frac{50}{5} = \boxed{10.00}$$

$$\text{Average Turnaround Time} = \frac{(22 + 6 + 22 + 8 + 17)}{5}$$

$$= \frac{75}{5}$$

$$= \boxed{15.00}$$