

Tutorial 4

Shivam Gansh Gansh
14-80 1201428

Q1) Shortest remaining time (SRT)
scheduling algo select the process
for execution which is smallest
amount of time

- P_0 spends 1st 2 unit in I/O . 7 unit of
CPU time & finally 1 unit in I/O
- P_1 spends 1st 4 unit in I/O , 14 in
CPU & 2 in I/O
- P_2 spends 6 unit in I/O , 21 in CPU
& 3 in I/O .

PID	AT	IO	BT	TO
P_0	0	2	7	1
P_1	0	4	14	2
P_2	0	6	21	3

Total time spent : 47
Idle time = $2+3 = 5$

$$90\% \text{ idle time} = (749) \times 200$$

The CPU remain idle for 10.6%

Q2) ① SPF : Here the process are scheduled as per burst time with less burst process has given more priority

$$\begin{aligned} \text{Avg W.T.} &= \frac{\text{sum of W.T.}}{\text{no. of process}} \\ &= \frac{38}{7} = \underline{\underline{6.25}} \end{aligned}$$

$$\begin{aligned} \text{Avg execution time} &= \frac{\text{sum of exe time}}{\text{no. of process}} \\ &= \frac{20}{7} = \underline{\underline{4.5}} \end{aligned}$$