

Name:- Tausif Khan.

Roll no :- 121

Div:- B.

Class :- SE / COMPS.

Experiment no:- 6

Put in the net in the form of a table
 & declare it as follows
 according to value
 $TA - TS = TAT$
 $AS = 0 - AS = 19$
 $JS = 0 - JS = 59$
 $FS = 0 - FS = 29$

$AS = 99 + 99 + 19 = 217$
 $FS + JS + AS = TAT$
 $29 + 59 + 19 = 107$

$TS - TAT = TS - 107 = 99$
 $TS = 206$

Experiment no:- 6

Page No.

Date

Aim:- To Study and Implement Non-Preemptive Priority Process Scheduling Algorithm.

Theory:-

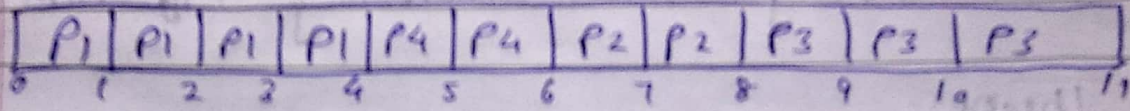
* Non-Preemptive Priority Scheduling.

- i) In the non-preemptive priority scheduling, the process are scheduled according to the priority number assigned to them.
- ii) Once the process gets scheduled, it will run till its completion.
- iii) Generally, the lower the priority number, the higher the priority of the process.
- iv) The people might get confused with the priority numbers, hence the GATE, there clearly mention which one is the highest priority and which one is the lowest one.

Example:

Process ID	Arrival time	Burst time	Priority Number
P ₁	0	4	3
P ₂	1	2	2
P ₃	2	3	4
P ₄	4	2	1

Gantt Chart



Turn around time = Completion time - Arrival time.

$$\begin{aligned} P_1 &= 4 - 0 = 4 \\ P_2 &= 8 - 1 = 7 \\ P_3 &= 11 - 2 = 9 \\ P_4 &= 6 - 4 = 2 \end{aligned}$$

$$\therefore \text{Average turn around time} = \frac{4 + 7 + 9 + 2}{4} = 5.5 \text{ ms}$$

Waiting time = Turn around time - Burst time.

$$\begin{aligned} \therefore P_1 &= 4 - 4 = 0 \\ P_2 &= 7 - 2 = 5 \\ P_3 &= 9 - 3 = 6 \\ P_4 &= 2 - 2 = 0 \end{aligned}$$

$$\therefore \text{Average waiting time} = \frac{0 + 5 + 6 + 0}{4} = 2.75 \text{ ms}$$

Conclusion:-

Thus we have Successfully Studied and Implemented Non-Preemptive Priority Algorithm.