Exp# 4b **SJF Scheduling**

Aim

To schedule snapshot of processes queued according to SJF (Shortest Job First) scheduling.

Algorithm

1. Define an array of structure *process* with members *pid*, *btime*, *wtime* & *ttime*.
2. Get length of the ready queue, i.e., number of process (say *n*)
3. Obtain *btime* for each process.
4. *Sort* the processes according to their *btime* in ascending order.
   a. If two process have same *btime*, then FCFS is used to resolve the tie.
5. The *wtime* for first process is 0.
6. Compute *wtime* and *ttime* for each process as:
   a. $wtime_{i+1} = wtime_i + btime_i$
   b. $ttime_i = wtime_i + btime_i$
7. Compute average waiting time *awat* and average turn around time *atur*.
8. Display *btime*, *ttime* and *wtime* for each process.
9. Display GANTT chart for the above scheduling
10. Display *awat* and *atur*
11. Stop

Result

Thus waiting time & turnaround time for processes based on SJF scheduling was computed and the average waiting time was determined.