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**Experiment No.:** 4

Construct a scheduling program with C that selects the waiting process with the smallest execution time to execute next.

### ****AIM****

The aim of this program is to implement CPU scheduling using the **Shortest Job First (SJF) non-preemptive** technique, where the process with the smallest execution time (burst time) is selected for execution next.

### ****ALGORITHM****

Start the program.

Read the number of processes and their burst times.

Assume all processes arrive at time 0.

Sort the processes in ascending order of burst time.

Compute the following:

**Waiting Time (WT):** WT[i] = WT[i-1] + BT[i-1]

**Turnaround Time (TAT):** TAT[i] = WT[i] + BT[i]

Display the process details with Burst Time, Waiting Time, and Turnaround Time.

Calculate and display the average Waiting Time and Turnaround Time.

End the program.

### ****PROGRAM/OUTPUT:****