LAB 6 : FCFS Scheduling

Objective

- To simulate First Come First Serve and Shortest Job First algorithms.

Instructions

1. For each question produce a screen shot of the program and the result of the runs.
2. Show your work to your TA and upload the complete exercise on TEAMS before the end of the lab to get full marks.
3. Use the following file naming convention:

   CS221 LAB 6-Name-ID

Note: 1 mark (out of 10) deducted per day late. 3 days late maximum.

Exercises

1. Modify function `Calc_AvgWaitTime()` such that it also calculates the average turnaround time. Rename the function as `Calc_Avg_WT_TAT()`. Display both values. (Hint. You can use the provided pseudocode in the slides)

2. Modify the program such that it takes into account the arrival time of the processes. Include `arrival_t` in the declaration of `struct Process` and modify `Calc_Avg_WT_TAT()` accordingly. (Hint. Wait time = Total burst – Arrival time)

3. Write a program `sjf.c` that simulates the Shortest Job First algorithm. Assume that all processes arrive at the same time, i.e. at time 0. You can use a basic sorting algorithm to sort the processes according to the burst time. (Hint. You can use a ready code for the sorting function from Chat GPT or otherwise).