

Operating Systems

Lab #4

Objective of this lab is to gain better understanding of scheduling algorithms by implementing a computer program (or set of computer programs) to simulate different scheduling algorithms.

Task

Write computer program(s) in any computer language of your choice which simulate **FCFS, SJF (Non Preemptive) and Priority (Non Preemptive)** scheduling algorithms.

Input to the simulator is a file that contains data related to at least 10,000 jobs. Each job has arrival time, burst time and priority associated with it. You should create this data file yourself (*hint: A separate program can be written to create such a file*)

For each algorithm, you must calculate following metrics

- a. Average Waiting Time
- b. Average Turn-around Time
- c. Average Response Time

Results obtained from simulations must be documented in a file.

Submission & Evaluation

1. This is a group assignment and group size cannot be more than 03.
2. All the working against every task should be shown to the instructor within lab.
3. Final code/document must also be uploaded on LMS.