
LUT
University
Operating Systems and System Programming
LAND
OF THE
CURIOUS

Experiment 7 – Project3

- Job Scheduling Algorithm Simulation
- Job.c
- Task1
  - Check whether the job information is read correctly by printing the information of the program.
- Task2
  - Run the FCFS algorithm to check whether the operation result is correct.

Experiment 7 – Project3

- Task 3
  - Supplement the code of Shortest-Job-First Scheduling algorithm, and calculate its waiting time and turnaround time (total and average).
- Task4
  - Referring to the implementation method of the above algorithms, write the code for highest response ratio next algorithm and priority schedule algorithm.

Experiment 7 – Project3

- response ratio=turnaround time/execution time

Job number	Arrive time	Execution time
P1	10	2
P2	10.2	1
P3	10.4	0.5
P4	10.5	0.3

- Response ratio for P2, R(P2)= (1+(12-10.2))/1=2.8
- R(P3)= (0.5+(12-10.4))/0.5=4.2
- R(P4)=(0.3+(12-10.5))/0.3=6 P4 is the next one to be executed

Experiment 7 – Project3

Job number	Arrive time	Execution time
P1	10	2
P2	10.2	1
P3	10.4	0.5
P4	10.5	0.3

- P4 is the next one to be executed
- After P4, R(P2)= (1+(12.3-10.2))/1=3.1
- R(P3)= (0.5+(12.3-10.4))/0.5=4.8
- P3 is the next one
- P2 the last one

Experiment 7 – Project3

- Submission on Moodle
- 1. Code: The program for this project
- 2. Report: post and explain the results