Dept. of CSE, IIITDM Kancheepuram

COM301P – Operating Systems

August 21, 2021

Lab Assignment – 3

In this lab, you will implement CPU scheduling algorithms Priority and RR.

(1) Priority Scheduling (Primitive)

Input:

1. Number of Processes
2. Process ID
3. Arrival Time of All the Processes
   a. All arriving at time 0
   b. All arrive at different time
4. Burst Time of All the Processes
5. Priority of Process

Output:

PID	Arrival Time	Burst Time	Completion Time	Waiting Time	Turn Around Time

Find the following performance parameters.

a) Average Waiting Time
b) Average Turnaround Time

(2) Round Robin Scheduling algorithm

Input:

1. Number of Processes
2. Process ID
3. Arrival Time of All the Processes
   a. All arriving at time 0
   b. All arrive at different time
4. Burst Time of All the Processes
5. Time Quantum

Output:

PID	Arrival Time	Burst Time	Completion Time	Waiting Time	Turn Around Time

Find the following performance parameters.

a) Average Waiting Time
b) Average Turnaround Time

Submission Instructions:

- Submit your assignment file in the Google classroom.
- After writing the code for the scheduling algorithm, write your own example and solve it in a plain paper (Own Handwriting). Also, draw the gantt chart. Write your Name and Roll No in each page. Later verify with the output of the program with the one you solved in plain paper.
- Attach the screen short of the output after the execution of the program.
- Save all the above things of all the programs in to one file and save as RollNo_Lab#.pdf (Example: EC20B1001_Lab3.pdf) and upload.
- Make sure the program description(handwritten), program, output screenshot for all questions are included in a **single pdf** as mentioned above.
- Save all the C program files as per the format RollNo_Lab#_QuestionNo.c (Example: EC20B1001_Lab3_Q2.c) and upload.
- Any form of plagiarism/copying from peer or internet sources will lead penalty.
- NOTE: DO NOT ZIP THE FILES.