Jaypee Institute of Information Technology, Noida Operating System and System Programming lab [15B17Cl472] Assignment-5

Instruction:

For executing following program you can use online C compiler in case you don't have Linux operating system installed. Please make sure it has to be a GDB compiler e.g https://www.onlinegdb.com/

- 1. Write a C program for implementing the priority scheduling using Linux operating system.
 - HINT: Read no. of process from user, Read burst time and priority for all processes, Apply Priority Scheduling algorithm, Print PID, Burst Time, Priority of process and Gantt Chart.
- 2. Write a Linux <u>C Program</u> for the Implementation of Shortest Job First Scheduling Algorithm.
 - HINT: Read the number of process from user, Read the burst time for all process, Print: Process, Waiting time, Turn-around time, also print the average waiting time and the average turnaround time in sec.
- $\textbf{3.} \ \text{Write a Linux} \ \underline{\text{C Program}} \ \text{for the Implementation of Round Robin Scheduling Algorithm}.$
 - HINT: Create few number of process, Read the process name and apply burst time of 20 ns for all the process, apply Round Robin Scheduling, print: Process name, Remaining Time, Total consumed Time.
- 4. Write a Linux <u>C Program</u> for the Implementation of Multilevel feedback queue scheduling algorithm. Use FCFS, Shortest Job first and Round Robin as scheduling queue.
- 5. For the above scheduling algorithm, write menu driven Linux c program and give average waiting time and the average turnaround time in sec.