***Jaypee Institute of Information Technology, Noida***

***Operating System and System Programming lab [15B17CI472]***

***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.

1. Write a Linux C Program 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.

1. Write a Linux C Program 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.

1. Write a Linux C Program for the Implementation of Multilevel feedback queue scheduling algorithm. Use FCFS, Shortest Job first and Round Robin as scheduling queue.
2. For the above scheduling algorithm, write menu driven Linux c program and give average waiting time and the average turnaround time in sec.