Assignment-5

Write a c/Java program for simulation of (1). Shortest Job First (SJF) (2). Shortest Remaining Time First (SRTF) CPU scheduler.

Program should maintain Ready_Q using process pointers. Each Process should have cpu_time and arrival_time . Cpu_time and arrival_time should be generated randomly. Demonstrate processes context switch according to SRTF Scheduling.

Struct process

{

Int pid;

Int cpu_time;

Int arrival_time;

Struct process * next;

}

Void main()

{

Initialize

/*

Generate n no of process.

Assign **process_id** serially to each process.

Randomly generate **cpu_time** and **arrival_time** for each process.

Create & initialize **Ready_Q** with n no of processes.

*/

Untill Ready_Q <> empy

{

select Queue **Ready_Q**

Randomly generate **current_time** requirement out of **total_time** requirement for corresponding process present on the front of corresponding queue.

Call delay for current_time no of times.

Subtract current_time from total_cpu_time & update total_cpu_time

Shift process to another queue.

displyQueue.

}