Southern Methodist University

Bobby B. Lyle School of Engineering

**Department of Computer Science**

CS 5343/7343

1. (must be answered by CS 7343 students only)

A math problem with text

Description automatically generated with medium confidence

1. This question involves implementing several different process scheduling algorithms. The scheduler will be assigned a predefined set of tasks and will schedule the tasks based on the selected scheduling algorithm. Each task is assigned a priority and CPU burst.

The following scheduling algorithms will be implemented:

1. First-come, first-served (FCFS), which schedules tasks in the order in which they request the CPU.
2. Shortest-job-first (SJF), which schedules tasks in order of the length of the tasks’ next CPU burst.
3. Priority scheduling, which schedules tasks based on priority.
4. Round-robin (RR) scheduling, where each task is run for a time quantum (or for the remainder of its CPU burst).
5. Priority with round-robin, which schedules tasks in order of priority and uses round-robin scheduling for tasks with equal priority.

Note: Please see supportingDocumentFile for a complete description of this Homework. There are supporting Java files for this assignment that will be provided in Canvas/Files/Homework3. You may choose any programming language that you would like for this homework.