CSE 503
Summer 2024
Project 2
Due Date: 15th July

Introduction:

We learned several CPU scheduling algorithm in class. Your task for this project is to simulate the round robin CPU scheduling with time quantum = 5ms algorithm using an input file containing jobs for CPU

Project Details:

Input:

Job.txt is provided as input file. Each line contains the name of the job, requesting time (millisecond since computer started) and duration (millisecond). For example:

Job 1, 20, 50

means a job for CPU called "Job 1" is requested to run at 20ms since CPU started, and the duration of the job is 50ms.

Output:

Schedule job order similar to the following format

$>Job 1, scheduled for 5ms
$>Job 2, scheduled for 5ms
$>Job 1, scheduled for 5ms
$>Job 3, scheduled for 5ms
$>Job 2, scheduled for 3ms, completed
$>job 1, scheduled for 2ms, completed

Because round robin is deterministic, you should see the same job scheduling result every time you run your code.

Important! : Please DO NOT change file names or add files on your own. I will compile your code using these file names. If your code does not compile you will get an automatic 0 point on this project.

Please remember:

All assignments and tests must be submitted on Blackboard.

All computer assignments and projects need to be written in C++ and will be submitted as follows:

1. **Visual Studio is not allowed *(IMPORTANT).*** You must use and IDE that allows you to compile and run individual C++ files. You may use Bloodshed Compiler from the link: http://www.bloodshed.net/dev/devcpp.html or any other similar environment. For linux/unix/mac users, you may use any text editor of your choice and the c/c++ compiler that comes with your system such as gcc.
2. All reports have to be submitted as a PDF report that contains:
   a. Title page with your name, assignment number and the day you are actually submitting this report (Not the assignment due date)

b. A brief description of the assignment.
c. A brief description of the logic employed and the needed input and expected output.
d. A comprehensive set of snapshots showing the inputs submitted, outputs obtained in the case of a successful output or a failure.
e. Any conclusions, analysis, or answers to any questions I as you as part of the assignment.
f. A text file that contains all source code.
g. Please zip both the PDF document with the source code and submit one zip file.