Programming Assignment 1

# Course: Operating Systems

# Semester: Spring 2020

# Deadline: 16 April 2020

# Instructor: Dr. Raazi M. K. Syed

Note: You will need to put all code in one file and put it in your project folder. Then you will need to rename the project folder as your student ID and submit it online in google classroom under this assignment tool. Plagiarism will be penalized.

Write a program in any language of your choice to implement Priority Scheduling with Aging.

1. You should take arrival times and burst durations as input from user in the beginning of the program.
2. You should give priority to longest remaining job (LRJF) in every time unit (loop iteration) i.e. Longest Job First with Pre-emption.
3. In addition to LRJF, you should also incorporate Age of the processes in every time unit (loop iteration).
4. Process with highest priority number should get the highest priority. You should add remaining burst durations and ages to calculate priorities of processes in every time unit (loop iteration) i.e. priority numbers should never go below zero.
5. You should give output in each of the iterations indicating which process gets the CPU.
6. You should calculate and display CPU Utilization and Throughput at the end.