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A3

CSC-139 Section 02

### Read Me

- 1) Ran the source files through regular java compiler and run, (jGrasp).
- 2) Two files are in called "input.txt" and "output.txt", one is sent to FileReader and the other to FileWriter. FileReader implemented with a scanner to set algorithms and process elements. FileWriter is used in each of the scheduling algorithm methods.
- 3) I implemented the scheduling algorithms by using a class Process which holds all the data for the process. Process class has Process Number, Arrival Time, CPU Burst and Priority.
- 4) Process class is implemented to read a line into a scanner to be able to read through each integer in the line and set them for each classed Process. All processes are thrown into a LinkedList<process> in order to save all the processes and implement them into queues.
- 5) After Linked list is set, the read algorithm from the first line goes into the method with the available arrays and Linked List. Each algorithm implements a different use of the Linked List and arrays with process elements.
- 6) Round Robin implemented with LinkedList queue in which it adds the process to the end of the queue and then moves to the next process. Time quantum taken into account and used to remove cpu burst if > time quantum otherwise only removes X
- 7) Had an issue with Priority scheduling with pre. The full comparisons were commented out but the idea of it was to:
  - a) Read the first arrival of the lowest arrival process and the last arrival process
  - b) Increment the arrival time by 1 and lower burst by 1
  - c) Reorder all the processes and compare priority queue
  - d) Repeat until first arrival = highest arrival.