## **CS401 Lab 8**

## This lab is to be completed individually.

This lab is for you to understand Queue data structure implementation.

### What to do?

#### Part 1

Implement LinkedList

- 1. Implementing **Sorted LinkedList** as such it inherits all the public and protected methods from your LinkedList.
- 2. Add employee objects from "emp.txt" file.(Can use the same emp.txt file from previous labs)
- 3. Sort elements based on ID.
- 4. Print the list after sorting.

Your implementation should include the following methods:

- 1. Add
- 2. Remove
- 3. Contains

#### Part 2

Implement circular linked list:

- 1. Insert first 8 elements from the emp.txt file.
- 2. Display elements after inserting.
- 3. Delete one element by searching through id.

#### Part 3

Implement your own **Doubly LinkedList** with the following methods:

Add

Remove

Contains

# What to turn in?

- 1. Source code
- 2. Your program's outputs in a PDF file
- 3. JAR file.
- 4. README file to demonstrate how your program works. Include a command to determine how to run the JAR file.

Please submit on Blackboard before the assigned due date