Department of Computer Science

COMP2321 (Second Semester – Spring2019/2020)

Project#1 Due Date: To be announced later (along with Project#2)

This project is based on what you have learnt about Linked List. The application you will implement with Linked List is the **Radix Sort**.

Your application should be able to sort a list of <u>strings</u> from an input file using Radix Sort.

Assume the maximum length of the input string is 15 characters; the input file would contain an unspecified number of strings. The input file should contain one string in each line. Having read the strings successfully, your application should then sort the input strings using the Radix Sort algorithm.

The user should be displayed a menu with the options necessary to run the functionalities of the program (i.e., read the input file, print the strings before sorting, sort the strings, print the sorted strings, and exit).

The deadline of this assignment will be announced along with project 2. However, late submissions will not be accepted for any reason. Please make sure that your application is running successfully. Policy of project discussion will be announced later.

Grading policy and general notes on the projects:

1. Your application should have all functionalities working properly. **Twenty** marks will be graded for the functionality of the project;

2. The following notes will make up the remaining 10 marks of the grade:
    a. There has to be adequate documentation and comments in the code (i.e., functions, loops, etc.);
    b. Your code should follow the code convention (i.e., spaces, indentations, etc.); and
    c. Your application should contain a menu to allow the user to select which option (s) he would like to run.
3. Any **plagerised** code will not be marked.

Good luck!