

## CS3323

### Programming Project 2

In this programming project, you will write a C++ program to store employee data in a List. You may use List from C++ STL (Standard Template Library) whose description can be found at “<https://www.geeksforgeeks.org/list-cpp-stl/>” and “<https://www.cplusplus.com/reference/list/list>”. You may challenge yourself to implement your own Linked List class (which is encouraged). In this case, **YOU WILL EARN 20 EXTRA POINTS FOR THIS PROJECT**.

Every employee object has id, first name, last name, phone number, email address and salary information as shown below as table.

Employee	
Attribute	Type
employeeId	int
firstName	String
lastName	String
phoneNumber	String
emailAddress	String
salary	double

You will be given a data file (“employeeDatasetp.txt”) which includes the information of many employees. Each line includes each employee’s information, separated by space.

Your program should read each line from the given file and insert each employee’s information in the List ordered by employeeId. This means that the newly read information may be inserted either in front of the List, at the end of the List or even in the middle of the List. Please note that your program is considered incomplete if the information is either inserted in random order or ordered by other attributes. In addition, don’t use a sort function to sort the unordered list after inserting the entire list not sorted by employeeId. This is considered incomplete as well.

To insert the information in the List, you use “insert” function (either the function from STL or your own function if you choose to implement your own List class).

After inserting the entire list of employees in the List, your program must display them on the screen from the first employee to the last one ordered by employeeId.

#### Submission Requirements

- You will submit your source code with “.cpp” extension. If you have multiple files, please archive/compress it into one file in a proper form (e.g. “.rar”, “.zip”...).
- You must submit the program that compiles and runs without any error to receive full points.
- Don’t forget to put comments in your source code so that the reader can understand your program easily.
- On the top of each source code file, please don’t forget to put your Name.