**CS3358**

**Programming Project 1: The linked list - Reference: chapter 17:**

1. **Create an array of 20 student records by random generator that should not be sorted.**
2. **Create a liked list of 20 student records. Each node is a node**

**of one student record from the unsorted array. (Append)**

1. **Each student record consists of student ID, student name, Student address, and GPA.**
2. **The student records must be defined as student object class with member functions.(No class definition no credit for the project.)**
3. **Execution and output:**
4. **Display the student records in the unsorted array**
5. **Display the student records from the unsorted linked list**
6. **Created a second linked list by Inserting the student records from the unsorted array to the linked list by using insert function. (Insert)**
7. **Execution and output**
8. **Display the sorted student records from the linked list.**

**The output of the linked list should be sorted by using**

**“insert” function from beginning of the list.**

***Do not use SORT Program. Using it will get penalty.***

1. **Delete the 15th record from the sorted list and display the**

**resulted list. (Delete)**

1. **Insert a 10th record and display the resulted sorted list.**
2. **Turn in with hard copy and must be professional and the turn in should include the source Program, and the displayed outputs as described above. Proper messages in the output is**

**required to indicate the execution and different outputs.**

**For all assignments in my class:**

**You may optionally use template or container in C++ or Java if you wish. Please high light on the turn in if you do Java.**

Due day: Monday Feb 3, 2014

Extra credit: using Java

Turn in on January 27

(No extra credit if the project is not completely done or using

e-mail questions.)