**Homework-8**

**Out Date:** 11/20/2018 (Tuesday)

**Due Date:** 11/26/2018 (Monday) 11:59PM

**Problem Statement:** Design an inventory class that stores the following members **[10 points]**:

* **serialNum:** An integer that holds a part's serial number.
* **manufactDate:** A member that holds the date the part was manufactured.
* **lotNum:** An integer that holds the part's lot number.

The class should have appropriate member functions for storing data into **[10 points]**, and retrieving data **[10 points]** from these members.

Next, design a linked-list class that can hold objects of the class described above **[10 points]**.

Last, design a program that uses the linked-list class described above. The program should have a loop that asks the user if he or she wishes to add a part to inventory, or take a part from inventory. The loop should repeat until the user is finished **[10 points]**.

If the user wishes to add a part to inventory, the program should ask for the serial number, date of manufacture, and lot number. The data should be stored in an inventory object, and pushed in the linked-list. Display the current list items. **[10 points]**

If the user wishes to take a part from inventory, the program should ask for serial number, remove it from the linked-list, and display the contents of its member variables. Display the current list items. **[10 points]**

When the user finishes the program, it should display the contents of the member values of all the objects that remain in the list. **[10 points]**

**Scoring Distribution [100 points]**

* 80 points for implementing the above mentioned requirements.
* 10 points for appropriate comments
* 10 points for programing style

**Blackboard Submission**

1. Submit the necessary files
2. Zip the files
3. Upload the zip file to Blackboard