CS620: Applied Algorithms, Fall 2018
Weisberg Division of Computer Science, Marshall University
Assignment 02
Total Points: 50
Due: 4:00 p.m., Sep 24

1. Given a singly linked list, find middle of the linked list. For example, if given linked list is 1->2->3->4->5 then output should be 3.
   If there are even nodes, then there would be two middle nodes, we need to print second middle element. For example, if given linked list is 1->2->3->4->5->6 then output should be 4. [40 pts]

2. Sort the element in the linked list, and then remove duplicate element from sorted linked list. For example, if the linked list is 60->11->21->11->43->43->11, sort the linked list to have 11->11->11->21->43->43->60. And then remove the duplicated elements, and get 11->21->43->60. [60 pts]

(Note 1: for all questions, please use hard coding, which means you can provide the input in the program. Please do not ask user to enter any value. Please let me know if you have any question. Thanks.)

(Note 2: For each question, you only submit one source file. In this assignment, we have two questions, so you will submit two source files on Blackboard. The programming language does not matter. Please let me know if you have any question. Thanks.)