**Scoring Rubric for Project 6: Insertion Sorting a Linked List**

*Due 10/31/2019 @ 3:30 pm*

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| Student Name: Zexuan Huang |

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|  | **Score** | **Maximum** |
| **Execution (50 pts):** | | |
| Program compiles without errors (warnings are okay) | 50 | **50** |
| **Implementation (45 pts):** | | |
| Implements the LinkedList class to be a friend of the Node class and contain only one pointer “head” | 5 | **5** |
| Implements a member function of LinkedList to do the insertion sort: implementation designs can vary, but some operations should be encapsulated in helper functions and it should be quadratic time | 3 | **15** |
| Implements the “big three”: copy constructor, copy assignment operator, and destructor for the LinkedList class | 12.5 | **15** |
| Plots the execution time vs. N for the vector and linked list | 0 | **5** |
| Describes the similarity or difference observed in the performance of the InsertionSort algorithm for a vector vs. Linked List | 0 | **5** |
| **Style (5 pts):** | | |
| The driver and functions are easy to follow based on the use of comments | 3 | **3** |
| Easily identifiable variable names | 2 | **2** |
| **Total (100 pts):** | 37.75 | **100** |

Notes:

Your submission was late, and in the project description it states “no credit will be given for late submissions.” Since it’s the first time you submitted something late, I graded your work out of 50.

Your copy constructor should assign the head (something like head = new Node(); current = head;) too but yours skips it. However, in your insertion sort and print, you are trying to access a value at the head node. This is inconsistent and therefore when trying to use a list created by the copy constructor, the list functions will not work.

Your insertion sort function gets stuck in an infinite loop.