**Scoring Rubric for Project 2 : Mergesort**

*Due 9/19/2019 @ 5 pm*

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|  | **Score** | **Maximum** |
| **Execution (50 pts):** | | |
| Program compiles without errors (warnings are okay) | 50 | **50** |
| **Implementation (40 pts):** | | |
| Uses function declarations as provided | 5 | **5** |
| Main function includes at least one unit test for MergeSortedLists (can use assert or printed output) | 0 | **5** |
| MergeSortedLists works for both even and odd sized input | 0 | **5** |
| MergeSortedLists works for both left and right lists emptying first | 0 | **5** |
| Implements MergeSort base case correctly (may be implicit) | 0 | **5** |
| MergeSort recursive case follows pseudocode: two recursive calls followed by call to MergeSortedLists (may have indexing bugs) | 5 | **5** |
| MergeSort passes 5 different unit tests (2 points each) | 4 | **10** |
| **Style (10 pts):** | | |
| The driver and functions are easy to follow based on the use of comments | 6 | **6** |
| Easily identifiable variable names | 4 | **4** |
| **Total (100 pts):** | 74 | **100** |

Notes:

You need to have a unit test for mergeSortedLists.

The base case for mergeSort is incorrect. The vector “a” is getting passed by reference, meaning it doesn’t change size. The base case should be if (left == right). So, your program gets caught in an infinite loop.

Your function call for mergeSort in main should have the the index values of left and right (i.e. left =0, right = v.size() – 1).

Your mergeSortedLists function has a lot of indexing issues which is causing the mergeSort method to fail.