## **COMP 303 - Assignment 2 - Project Report**

Name: Hakan Şahin

**About this Assignment:** This assignment asks us to implement insertion sort, where the user inputs the size of the array and sorts out the array from smaller integers to bigger integers. After sorting the array, it asks us to remove the duplicate elements in the array and then summing up the each element of the array and printing the result. Nearly every line of the code is commented and I tried to explain what I did as clear as possible.

My code works on every test case I have presented with it and sorts out the array according to that. Every part of this assignment working without any problems. However there are two parts I was confused with it:

- I didn't know what take the size of list as command line argument, therefore I just took it from console. (I did research on this however I didn't come up with any solutions)
- At the end of the program console prints Program Finished, but it is different from the one in the sample output. Since Exit was already given, I didn't edit it, therefore those two slightly differs.

In order to run my code, you need to open my file with the MARS editor. You need to assemble the current file and then run it. After you run it, you need to input n in Run I/O and n times other integers. Then the program will do the rest. It also checks boundaries of n which cannot be lower than 0 and higher than 100.

## This assignment includes:

- Getting input from user
- Printing out messages
- Printing out integers
- Filling inside of an array
- Insertion sort
- Printing elements of the array
- Removing duplicates from a sorted array
- Summing the elements of the array
- Error handling of n boundaries