# CDS251HW5 Report

***Submission***: Write a short report about your experience with implementing Bubble Sort

The homework itself was pretty simple, acting mostly as an extension from the lab. Indexing is a clever trick I had yet to use in my programming past, and definitely plan to incorporate that in future projects. During the lab upon initial introduction is it was intuitive and easy to understand, a good experience all around. I’ve not personally done much with “handmade” Bubble sorting, as in my experience I’ve been able to rely upon prebuilt sorting methods.

***Extra Credit:***

*Numbers2.txt user runtime:*

14.137s

*200k numbers O() Time:*

Compute how long it would take 200,000 numbers to be sorted using O() formula from algorithm complexity:

*Numbers3.txt user runtime:*

1m38.679s

*Compare Theoretical and Actual Run time:*

The actual run time significantly outpaced the theoretical run time, almost double the expectation.