Jonathan Bahm Assignment 6 Data Structures and Algorithms

1 My experience with the sorting algorithms

1.1 Time Differences

The time differences were a little suprising to me. My intial thoughts on sorting algorithms were that the more complex the algorithm was, the faster it would sort. However this did not end up being the case...

When I ran timed the different functions, selection sort(a fairly basic one) ended up generally running at the same speed as quicksort(a more complicated algorithm)

1.2 Programming Language

Honestly, I dont really feel that writing it in something other than C++ would change the result at all. When writing the sorting algorithms, I never really came across anything that I couldnt do in C++ but wouldve been able to do in another language

1.3 Potential Shortcomings

The only real shortcomings I saw were that the times it took to sort the array changed somewhat drastically between the different times I ran it. Relative to each other they were all the same(i.e Bubble Sort was still slower than Insertion Sort) but the actual numbers were rather inconsistent.

1.4 Final Thoughts

I really enjoyed writing all the different algorithms. I definitley had some thoughts about which ones were faster going into the assignment but they were definitley changed when actually writing them. Some of the algorithms were also way more complex to write then I had initially thought!