

Question 10

After actually coding this assignment, and graphing everything and seeing how they ran on a graph I have noticed a lot. Just like I predicted quick sort was overall the fastest. Merge Sort did good, but was a little bit slower than quick sort. Shell sort did really good, and outperformed insertion and selection sorts. Insertion and selection sort were slower for larger inputs which shows that they have $O(n^2)$ time complexity. Finally, bubble sort was consistently performing the worst out of all of the sorting algorithms. In terms of matching up to my predicted ranking, my ranking was very similar to how the algorithms performed.