Bubble sort algorism has a time complexity of O (N^2), which is the same as selection sort.

On the other hand, merge sort and quick sort have a time complexity and worst-case performance of [O](https://en.wikipedia.org/wiki/Big_O_notation)(n log n)

From the graphs, we can clearly see a quadratic relation between time and vector length using bubble sort and selection sort, and an apparently linear relationship between time and vector length using merge sort and quick sort