



For small input size, bubble sort performs better than quick sort, but as the input size increases, the sorting time for bubble sort dramatically increases while quick sorting uses divide and conquer algorithm so it can sort a large number of datasets in a relatively short amount of time.

4.

The threshold chosen was 100 using code to calculate when the time of average bubble sort takes longer than average quick sort which is 100 and that is when the input is at max for being small.