

1. From my data for larger inputs of elements, quick sort was consistently faster than merge sort for every value over 1000
2. Yes, overall quicksort should be faster than merge sort even though both of their average runtimes are $n\log(n)$

Graphs of data points for 3 and 4 in excel sheet

3. More or less yes, the line from a distance looks about linear with a slight slope increase throughout, similar to the $n\log n$ graph
4. Similar to merge sort, the graph for quick sort also more or less fits the curve of $n\log n$, which is expected
5. Insertion sort is preferable when there are relatively few elements that are being sorted, but the data looks like the crossover point is close to about 20 elements being sorted