**Empirical/Performance Analysis of all the sorting algorithms :**

- After performance analysis of all the sorting algorithms it is found that quick sort works well and fast for larger data set as compare to other sorting algorithms while insertion sort works efficient for small datasets (<10000).

- For insertion sort if we cross the input array size

1. **Heap Sort :**
2. **Merge Sort :**
3. **Quick Sort :**
4. **Bubble Sort :**
5. **Performance analysis comparison of all the above four sorting algorithms :**