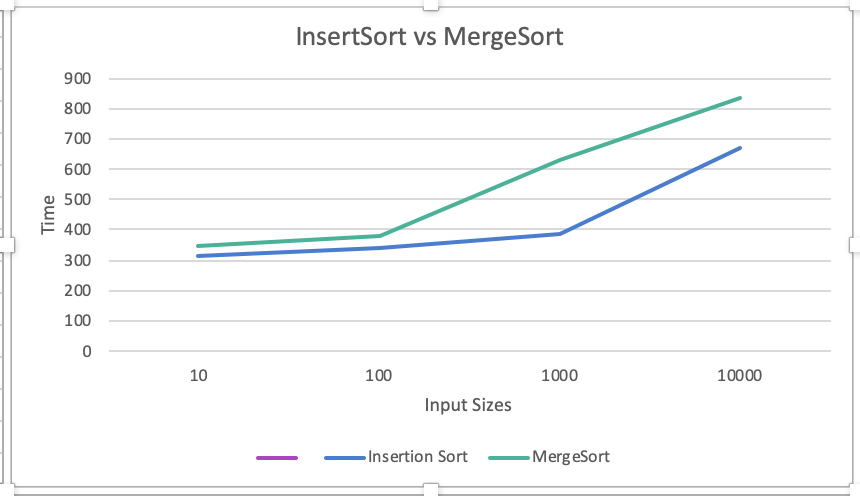
Practical 5 :

**Quick Questions:**

1. Linearithmic time
2. It uses extra space in proportion to the size of the input
3. Divide and conquer
4. Insertion Sort
5. Merge sort

**Exercise 3**:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Input size | 10 | 100 | 1000 | 10000 |
|  |  |  |  |  |
| Insertion Sort | 316 | 340 | 388 | 670 |
| MergeSort | 350 | 380 | 628 | 838 |



As we can see from the results, insertion sort is always faster than merge sort for all input sizes.