

Sorting

1. Bubble sort

- In bubble sort algo elements are compared one by one and if first element is bigger than second one then both elements are swapped. In this manner complete array is sorted.

$$O(\text{time}) = O(n^2) \quad O(\text{space}) = O(1)$$

2. Selection sort

- Selection sort is a sorting algo where the smallest element is selected and it is swapped with an element with i position.

$$O(\text{time}) = O(n^2) \quad O(\text{space}) = O(1)$$

3. Insertion sort

4. Count sort

5. Merge sort

6. Heap sort

7. Quick sort