

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.

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

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.

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

3. Insertion sort

- In insertion sort we compare the element from right to left and key element is inserted at the right position.

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

4. Count sort 5. Merge sort 6. Heap sort 7. Quick sort