

# 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 at position i.

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

## 3. insertion sort

## 4. count sort

## 5. merge sort

## 6. Heap sort

## 7. Quick sort