

Tutorials (13)

① Define Insertion Sort:

A sorting algorithm that places an unsorted element at its suitable place in each iteration separating the elements as sorted and unsorted array.

② Explain how it works.

First; Take out the first element and compare it with the second element and take out the least value as sorted array and continue the same process ahead.

Ex:- 10, 8, 9, 12.

8, 10 (sorted) 9, 12 (unsorted)

8, 9, 10 (sorted) 12 (unsorted)

8, 9, 10, 12 //

③ Explain the concept of Merge Sort.

In this method take out the unordered array and divide into two halves. Divide the array into two halves each until it ends up having only two elements each. Then sort each of the pairs by order and then consider every pair and sort them out and merge together.

④ How it divides and conquers to sort an array.

Divide by equal halves. If the array is having odd no. of elements then divide by two and make it a pair with a less no. of elements and the rest of the elements.

⑤ Which scenario is Insertion sort preferred over Merge sort?

- When the size of array is small.
- When the array is nearly sorted.