**SEARCHING and SORTING**

Binary Search,

Selection Sort,

Bubble Sort,

Insertion Sort,

Merge Sort,

Heap Sort,

QuickSort,

Bucket Sort,

ShellSort,

Binary Insertion Sort,

**Iterative Quick Sort**,

QuickSort on Singly Linked List,

QuickSort on Doubly Linked List,

When does the worst case of Quicksort occur?

Merge Sort for Linked Lists,

**Sort a nearly sorted (or K sorted) array,**

**Sort n numbers in range from 0 to n^2 – 1 in linear time,**

Sort an array in wave form,

Interpolation search vs Binary search,

Which sorting algorithm makes minimum number of memory writes?

A Problem in Many Binary Search Implementations,

Why is Binary Search preferred over Ternary Search? ,

**FIND:**

Find the Minimum length Unsorted Subarray, sorting which makes the complete array sorted,

K’th Smallest/Largest Element in Unsorted Array,

K’th Smallest/Largest Element in Unsorted Array in Expected Linear Time,

K’th Smallest/Largest Element in Unsorted Array in Worst Case Linear Time,

Find the closest pair from two sorted arrays,

Find k closest elements to a given value,

Find **common elements in three sorted arrays**,

Given a sorted array and a number x, **find the pair in array whose sum is closest to x**,

Count 1’s in a sorted binary array,

**Search in an almost sorted array,**