

### **Arrays**

- Second Largest Element
- Move all Zeros to End
- Reverse an Array
- Rotate an Array
- Next Permutation
- Majority Element II
- Stock Buy and Sell (With No Limit)
- Stock Buy and Sell (With One Limit)
- Minimize the Heights
- Maximum Sum Subarray
- Maximum Product Subarray
- Maximum Sum Subarray in Circular
- First Missing Positive

### **String**

- String to Integer Your Own atoi()
- Add Two Binary Strings
- Anagram Check
- First Non-Repeating Character
- KMP Algorithm for Pattern Searching
- Min Chars to Add for Palindrome
- String Rotations of each other

## Sorting

- Sort an array of 0s, 1s and 2s
- Count Inversions
- Merge Overlapping Intervals
- Insert and Merge Interval



- Find Non-Overlapping Intervals
- Merge Two Sorted Arrays With Constant Extra Space
- Top K Frequent Elements

## Searching

- Count Occurrences in a Sorted Array
- Minimum in a Sorted and Rotated Array
- Search in a Sorted and Rotated Array
- Peak Element
- K-th Element of Merged Two Sorted Arrays
- Aggressive Cows
- Allocate Minimum Pages
- Kth Missing Positive Number

### **Matrix**

- Spiral Traversal
- Rotate Matrix
- Search in a sorted matrix
- Search in a row-wise sorted
- Search in a row-wise and column-wise sorted
- Set Matrix Zeroes

## Hashing

- Pair with given sum 2Sum
- Count Pairs with given sum
- Intersection of Two Sets
- Union of Two Sets



- Longest Consecutive Subsequence
- Group Anagrams
- Count Subarrays with given sum
- Count Subarrays with given XOR

### **Two Pointer Technique**

- Check for Pair Sum in Sorted
- Triplets in Sorted
- Triplets in Unsorted
- Print All Pairs with given sum
- Closest Pair
- Count Pairs in Sorted
- Subarray with given sum
- Count distinct elements in every window of size k
- Longest Substring With Distinct Characters
- Trapping Rain Water
- Container with most water

### **Prefix Sum**

- Equilibrium Point
- Longest Subarray with Given Sum
- Longest Subarray with Equal No of 0s and 1s
- Product of Array except Self
- Find Starting Petrol Pump for Circular Tour

### **Linked List**



- Reverse a Linked List
- Rotate a Linked List
- Merge Two Sorted Lists
- Reverse a linked list in groups
- Sum two Linked Lists
- Clone a Linked List
- Detect Cycle
- First Node of the Cycle
- Remove Cycle
- LRU Cache

## **Backtracking**

- Permutations of a String
- N Queens
- Solve the Sudoku

#### **Tree**

- Level Order Traversal
- Height of a Binary Tree
- Diameter of a Tree
- Invert Binary Tree
- Construct Tree from Inorder and Preorder
- Morris Traversal
- Boundary Traversal
- Maximum Path Sum
- Count all K Sum Paths in Binary Tree
- Is Valid BST
- K-th Smallest in BST
- Pair with given Sum in BST



- Correct a BST with two nodes got swapped
- LCA in BST
- Serialize and Deserialize a Binary Tree

### Heap

- K Largest Elements
- K closest point to origin
- Merge K Sorted Lists
- Median of a Stream

### Stack

- Valid Parentheses
- Longest Valid Parentheses
- Next Greater Element
- Stock Span
- Largest Area in a Histogram
- Maximum and Minimum of every window size
- Min Stack
- Evaluate Reverse Polish Notation
- Decode the String

## **Queue and Deque**

- Sliding Window Maximum
- Maximum score with jumps of at most length K

# **Dynamic Programming**



- Longest Increasing Subsequence
- Longest String Chain Chain of words in an Array
- Longest Common Subsequence
- Longest Palindromic Subsequence
- Longest Palindromic Substring
- Count Palindromic Substring
- Edit Distance
- Stair Climbing
- Weighted Stair Climbing
- 0-1 knapsack
- Coin Change Count Ways
- Count Change Minimum Coins
- Minimum Jumps to Reach End
- Subset Sum Problem
- Partition Equal Subset Sum
- Stock Buy and Sell (Limit of K)
- Stock Buy and Sell (Limit of 2)
- House Robbing
- House Robbing (Circular)
- Count Possible Decodings of a Digit Sequence
- Matrix Chain Multiplication
- Boolean Parenthesization
- Word Break

### **Greedy**

- Minimum Platforms
- Weighted Job Scheduling
- Job Sequencing
- Maximize Partitions with Unique Characters



## **Graph**

- DFS
- BFS
- Minimum time to Rot Oranges
- Cycle in an Undirected Graph
- Islands in a Graph
- Topological Sorting
- Cycle in a Directed Graph
- Redundant Connections Bridges in a Graph
- Articulation Points
- Minimum Cost to connect all points
- Dijkstra's Algorithm
- Flood Fill
- Clone a Graph
- Alien Dictionary
- Distance from Source Negative Weight Cycle
- Find the City With the Smallest Number of Neighbors at a Threshold Distance
- Email Account Merging

### **Tries**

- Implement Trie
- Word Search
- Maximum XOR of Two Numbers in an Array

### **Bit Manipulation**



- Find the only repetitive element between 1 to N-1
- Find the Missing Number
- Unique Number 1
- Unique Number 2
- Unique Number 3