

# DSA SHEET

## Array-

[Number of Good Pairs](#)

[How Many Numbers Are Smaller Than the Current Number](#)

[Two Sum](#)

[Remove Duplicates from Sorted Array](#)

[Missing Number](#)

[Majority Element](#)

[Sort Colors](#)

[Maximum Subarray](#)

[Set Matrix Zeroes](#)

[Container With Most Water](#)

[Search a 2D Matrix](#)

[Reverse Pairs](#)

## SLIDING WINDOW

[Minimum Size Subarray Sum](#)

[Max Consecutive Ones III](#)

[Minimum Operations to Reduce X to Zero](#)

[Minimum Window Substring](#)

[Frequency of the Most Frequent Element](#)

## TWO POINTERS

Sum of Square Numbers

Number of Subsequences That Satisfy the Given Sum Condition

Minimize Maximum Pair Sum in Array

Trapping Rain Water

## **STRINGS**

Valid Anagram

Isomorphic Strings

Longest Common Prefix

Reverse Words in a String

Group Anagrams

Sum of Beauty of All Substrings

Longest Substring Without Repeating Characters

Longest Palindromic Substring

String to Integer (atoi)

Minimum Window Substring

## **LINKED LIST**

Palindrome Linked List

Intersection of Two Linked Lists

LRU Cache

Add Two Numbers

Rotate List

Reorder List

Linked List Cycle II

Rearrange a Linked List in Zig-Zag fashion

[Flattening a Linked List](#)  
[Reverse Nodes in k-Group](#)

## **STACK AND QUEUE**

[Implement Stack using Queues](#)

[Next Greater Element I](#)

[Valid Parentheses](#)  
[Next Greater Element II](#)

[Asteroid Collision](#)  
[Remove K Digits](#)

[Sliding Window Maximum](#)

## **Recursion and BackTracking**

[Fibonacci Number](#)  
[Pow\(x, n\)](#)  
[Power of Three](#)

[Combination Sum](#)

[Subsets](#)

[Coin Change](#)

[Elimination Game](#)  
[Rat in a Maze Problem - I](#)

[Word Break](#)

[N-Queens](#)

[Sudoku Solver](#)

[tug-of-war](#)

## **DYANMIC PROGRAMMING**

[Fibonacci Number](#)

[Climbing Stairs](#)

[Counting Bits](#)

[Cherry Pickup II](#)

[Count of subsets with sum equal to X](#)

[Longest Common Subsequence](#)

[Longest Palindromic Subsequence](#)

[Minimum number of deletions and insertions](#)

[Best Time to Buy and Sell Stock II](#)

[Burst Balloons](#)

## **BINARY TREE & BINARY SEARCH TREE**

[Binary Tree Preorder Traversal](#)

[Binary Tree Inorder Traversal](#)

[Binary Tree Level Order Traversal](#)

[Vertical Order Traversal of a Binary Tree](#)

[Top View of Binary Tree](#)

[Binary Tree Right Side View](#)

[Left View of Binary Tree](#)

[Bottom View of Binary Tree](#)

[Burning Tree](#)

[Kth Smallest Element in a BST](#)

[Largest BST in a Binary Tree](#)

[Binary Tree Maximum Path Sum](#)

[Serialize and Deserialize Binary Tree](#)

[Lowest Common Ancestor of a Binary Search Tree](#)

[Two Sum IV - Input is a BST](#)

[Replace every element with the least greater element on its right](#)

## **GRAPH**

[DFS of Graph](#)

[BFS of graph](#)

[Number of Triangles](#)

[Rotting Oranges](#)

[Course Schedule](#)

[Course Schedule II](#)

[Word Ladder](#)

[Word Ladder II](#)

[Alien Dictionary](#)

[Cheapest Flights Within K Stops](#)

[Find the City With the Smallest Number of Neighbors at a Threshold Distance](#)

[Accounts Merge](#)

## **BIT MANIPULATION**

[Count set bits in an integer](#)

[Power of Two](#)

[Single Number](#)

[Find position of the only set bit](#)

[Count number of bits to be flipped to convert A to B](#)

[Find XOR of numbers from L to R.](#)

[Calculate square of a number without using \\*, / and pow\(\)](#)

[Divide two integers without using multiplication, division and mod operator](#)

[Subsets](#)

[Count Primes](#)

## **BINARY SEARCH**

[Binary Search](#)

[Search Insert Position](#)

[Sqrt\(x\) USING BS](#)

[Search in Rotated Sorted Array](#)

[Find First and Last Position of Element in Sorted Array](#)

[Find Minimum in Rotated Sorted Array](#)

[Find Peak Element](#)

[Search a 2D Matrix](#)

[Find a Peak Element II](#)

[Capacity To Ship Packages Within D Days](#)

[Painter's Partition Problem](#)

[Minimize Max Distance to Gas Station](#)

[Allocate Books](#)

[Aggressive Cows](#)