

# STRIVER DSA SHEET

[Takeuforward Website](#)

[Sheet Link](#)

## Day 1 (Arrays)

- [Sort an array of 0's 1's 2's without using extra space or sorting algo](#) - [Cpp Soution](#)
- [Repeat and Missing Number](#) - [Cpp Soution](#)
- [Merge two sorted Arrays without extra space](#) - [Cpp Soution](#)
- [Kadane's Algorithm](#) - [Cpp Soution](#)
- [Merge Overlapping Subintervals](#) - [Cpp Soution](#)
- [Find the duplicate in an array of N+1 integers](#) - [Cpp Soution](#)

## Day 2 (Arrays)

- [Set Matrix Zeroes](#) - [Cpp Soution](#)
- [Pascal's Triangle](#) - [Cpp Soution](#)
- [Next Permutation](#) - [Cpp Soution](#)
- [Count Inversions in an array](#) - [Cpp Soution](#)
- [Best Time to Buy and Sell Stock](#) - [Cpp Soution](#)
- [Rotate Image](#) - [Cpp Soution](#)

## Day 3 (Array/Maths)

- [Search a 2D Matrix](#) - [Cpp Soution](#)
- [Pow\(x, n\)](#) - [Cpp Soution](#)
- [Majority Element](#) - [Cpp Soution](#)
- [Majority Element II](#) - [Cpp Soution](#)
- [Unique Paths](#) - [Cpp Soution](#)
- [Reverse Pairs](#) - [Cpp Soution](#)

## Day 4 (Hashing)

- [Two Sum](#) - [Cpp Soution](#)
- [4Sum](#) - [Cpp Soution](#)
- [Longest Consecutive Sequence](#) - [Cpp Soution](#)
- [Largest subarray with 0 sum](#) - [Cpp Soution](#)
- [Count the number of subarrays having a given XOR](#)

- [Longest Substring Without Repeating Characters - Cpp Soution](#)

## Day 5 (LinkedList)

- [Reverse Linked List - Cpp Soution](#)
- [Middle of the Linked List - Cpp Soution](#)
- [Merge Two Sorted Lists - Cpp Soution](#)
- [Remove Nth Node From End of List - Cpp Soution](#)
- [Delete Node in a Linked List - Cpp Soution](#)
- [Add Two Numbers - Cpp Soution](#)

## Day 6 (LinkedList 2)

- [Intersection of Two Linked Lists - Cpp Soution](#)
- [Linked List Cycle - Cpp Soution](#)
- [Reverse Nodes in k-Group - Cpp Soution](#)
- [Palindrome Linked List - Cpp Soution](#)
- [Linked List Cycle II - Cpp Soution](#)
- [Flattening a Linked List - Cpp Soution](#)
- [Rotate List - Cpp Soution](#)

## Day 7 (2 Pointers)

- [Copy List with Random Pointer - Cpp Soution](#)
- [3Sum - Cpp Soution](#)
- [Trapping Rain Water - Cpp Soution](#)
- [Remove Duplicates from Sorted Array - Cpp Soution](#)
- [Max Consecutive Ones - Cpp Soution](#)

## Day 8 (Greedy)

- [N meetings in one room - Cpp Soution](#)
- [Minimum Platforms - Cpp Soution](#)
- [Job Sequencing Problem - Cpp Soution](#)
- [Fractional Knapsack - Cpp Soution](#)
- [Greedy Algorithm to find Minimum number of Coins](#)

## Day 9 (Recursion)

- [Subset Sums - Cpp Soution](#)
- [Subsets II - Cpp Soution](#)

- [Combination Sum - Cpp Soution](#)
- [Combination Sum II - Cpp Soution](#)
- [Palindrome Partitioning - Cpp Soution](#)
- [Permutation Sequence - Cpp Soution](#)

## Day 10 (Recursion, Backtrack)

- [Permutations - Cpp Soution](#)
- [N-Queens - Cpp Soution](#)
- [Sudoku Solver - Cpp Soution](#)
- [m Coloring Problem](#)
- [Rat in a Maze - Cpp Soution](#)
- [Word Break - Cpp Soution](#)

## Day 11 (Divide n Conquer)

- [Calculating n-th real root using binary search](#)
- [Median in a row-wise sorted Matrix - Cpp Soution](#)
- [Single Element in a Sorted Array - Cpp Soution](#)
- [Search in Rotated Sorted Array - Cpp Soution](#)
- [Median of Two Sorted Arrays - Cpp Soution](#)
- [K-th Element of Two Sorted Arrays](#)

## Day 12 (Bits)

- [Power of Two - Cpp Soution](#)
- [Counting Bits - Cpp Soution](#)
- [Divide two integers without using multiplication, division and mod operator](#)
- [Subsets - Cpp Soution](#)
- [Find MSB In O\(1\) - Cpp Soution](#)
- [Calculate square of a number without using \\*, / and pow\(\)](#)

## Day 13 (Stack/Queues)

- [Implement stack using array - Cpp Soution](#)
- [Implement Queue using array - Cpp Soution](#)
- [Implement Stack using Linked List - Cpp Soution](#)
- [Implement Queue using Linked List - Cpp Soution](#)
- [BFS of graph - Cpp Soution](#)

- [Implement Stack using Queues - Cpp Soution](#)
- [Implement Queue using Stacks - Cpp Soution](#)
- [Valid Parentheses - Cpp Soution](#)
- [Next Greater Element - Cpp Soution](#)

## Day 14 (Miscellaneous)

- [Nearest Smaller Element - Cpp Soution](#)
- [LRU Cache - Cpp Soution](#)
- [Largest Rectangle in Histogram - Cpp Soution](#)
- [Sliding Window Maximum - Cpp Soution](#)
- [Min Stack - Cpp Soution](#)
- [Rotting Oranges - Cpp Soution](#)

## Day 15 (Strings)

- [Reverse Words in a String - Cpp Soution](#)
- [Longest Palindromic Substring - Cpp Soution](#)
- [Roman to Integer - Cpp Soution](#)
- [Integer to Roman - Cpp Soution](#)
- [Implement strStr - Cpp Soution](#)
- [String to Integer - Cpp Soution](#)
- [Longest Common Prefix - Cpp Soution](#)
- [Rabin-Karp Algorithm for Pattern Searching](#)

## Day 16 (Strings)

- [Z algorithm \(Linear time pattern searching Algorithm\)](#)
- [KMP Algorithm for Pattern Searching](#)
- [Minimum characters to be added at front to make string palindrome](#)
- [Valid Anagram - Cpp Soution](#)
- [Count and Say - Cpp Soution](#)
- [Compare Version Numbers - Cpp Soution](#)

## Day 17 (Binary Tree)

- [Binary Tree Inorder Traversal - Cpp Soution](#)
- [Binary Tree Preorder Traversal - Cpp Soution](#)
- [Binary Tree Postorder Traversal - Cpp Soution](#)
- [Binary Tree Right Side View - Cpp Soution](#)

- [Bottom View of Binary Tree - Cpp Soution](#)
- [Top View of Binary Tree - Cpp Soution](#)

## Day 18 ()

- [Binary Tree Level Order Traversal - Cpp Soution](#)
- [Binary Tree Zigzag Level Order Traversal - Cpp Soution](#)
- [Maximum Depth of Binary Tree - Cpp Soution](#)
- [Diameter of Binary Tree - Cpp Soution](#)
- [Balanced Binary Tree - Cpp Soution](#)
- [Lowest Common Ancestor of a Binary Tree - Cpp Soution](#)
- [Same Tree - Cpp Soution](#)

## Day 19 (Binary Tree)

- [Binary Tree Maximum Path Sum - Cpp Soution](#)
- [Construct Binary Tree from Preorder and Inorder Traversal - Cpp Soution](#)
- [Construct Binary Tree from Inorder and Postorder Traversal - Cpp Soution](#)
- [Symmetric Tree - Cpp Soution](#)
- [Flatten Binary Tree to Linked List - Cpp Soution](#)

## Day 20 (Binary Search Tree)

- [Populating Next Right Pointers in Each Node - Cpp Soution](#)
- [Search in a Binary Search Tree - Cpp Soution](#)
- [Convert Sorted Array to Binary Search Tree - Cpp Soution](#)
- [Validate Binary Search Tree - Cpp Soution](#)
- [Lowest Common Ancestor of a BST - Cpp Soution](#)
- [Predecessor and Successor - Cpp Soution](#)

## Day 21 (Binary Search Tree)

- [Floor and Ceil from a BST](#)
- [Kth Smallest Element in a BST - Cpp Soution](#)
- [Kth largest element in BST - Cpp Soution](#)
- [Two Sum IV - Input is a BST - Cpp Soution](#)
- [Binary Search Tree Iterator - Cpp Soution](#)
- [Largest BST - Cpp Soution](#)

- [Serialize and Deserialize Binary Tree - Cpp Soution](#)

## Day 22 (Mixed Questions)

- [Binary Tree to DLL - Cpp Soution](#)
- [Find Median from Data Stream - Cpp Soution](#)
- [Kth Largest Element in a Stream - Cpp Soution](#)
- [Distinct Numbers in Window - Cpp Soution](#)
- [Kth Largest Element in an Array - Cpp Soution](#)
- [Flood Fill - Cpp Soution](#)

## Day 23 (Graph)

- [Clone Graph - Cpp Soution](#)
- [DFS of Graph - Cpp Soution](#)
- [BFS of graph - Cpp Soution](#)
- [Detect cycle in an undirected graph - Cpp Soution](#)
- [Detect cycle in a directed graph - Cpp Soution](#)
- [Topological sort - Cpp Soution](#)
- [Number of Islands - Cpp Soution](#)
- [Is Graph Bipartite? - Cpp Soution](#)

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