Topic-Wise DSA Interview

Problem Set

🧩 1️⃣ Arrays

1. **Two Sum**

2. **Best Time to Buy and Sell Stock**

3. **Maximum Subarray (Kadane's Algorithm)**

4. **Merge Intervals**

5. **Product of Array Except Self**

6. **3Sum**

7. **Container With Most Water**

8. **Set Matrix Zeroes**

9. **Rotate Array**

10. **Missing Number**

🧵 2️⃣ Strings

1. **Longest Substring Without Repeating Characters**

2. **Valid Anagram**

3. **Group Anagrams**

4. **Longest Palindromic Substring**

5. **String to Integer (atoi)**

6. **Reverse Words in a String**

7. **Valid Parentheses**

8. **Implement strStr()**

9. **Decode Ways**

10. **Count and Say**

🔗3️⃣ Linked List

1. **Reverse Linked List**

2. **Merge Two Sorted Lists**

3. **Linked List Cycle**

4. **Remove Nth Node From End of List**

5. **Intersection of Two Linked Lists**

6. **Add Two Numbers**

7. **Palindrome Linked List**

8. **Copy List with Random Pointer**

9. **Reorder List**

10. **Flatten a Multilevel Doubly Linked List**

🧱 4️⃣ Stack & Queue

1. **Valid Parentheses**

2. **Min Stack**

3. **Next Greater Element I**

4. **Daily Temperatures**

5. **Evaluate Reverse Polish Notation**

6. **Implement Queue using Stacks**

7. **Simplify Path**

8. **Basic Calculator**

9. **Largest Rectangle in Histogram**

10. **Sliding Window Maximum**

🌳 5️⃣ Binary Tree

1. **Binary Tree Inorder Traversal**

2. **Maximum Depth of Binary Tree**

3. **Invert Binary Tree**

4. **Diameter of Binary Tree**

5. **Balanced Binary Tree**

6. **Path Sum**

7. **Lowest Common Ancestor**

8. **Serialize and Deserialize Binary Tree**

9. **Construct Binary Tree from Preorder and Inorder**

10. **Symmetric Tree**

🌲 6️⃣ Binary Search Tree

1. **Validate Binary Search Tree**

2. **Insert into a BST**

3. **Delete Node in a BST**

4. **Lowest Common Ancestor of a BST**

5. **Kth Smallest Element in a BST**

6. **BST Iterator**

7. **Convert Sorted Array to BST**

8. **Range Sum of BST**

9. **Trim a BST**

10. **Recover Binary Search Tree**

♻️ 7️⃣ Recursion & Backtracking

1. **Subsets**

2. **Permutations**

3. **Combination Sum**

4. **Combination Sum II**

5. **Letter Combinations of a Phone Number**

6. **N-Queens**

7. **Word Search**

8. **Palindrome Partitioning**

9. **Generate Parentheses**

10. **Sudoku Solver**

💡 8️⃣ Dynamic Programming

1. **Climbing Stairs**

2. **House Robber**

3. **Coin Change**

4. **Longest Increasing Subsequence**

5. **Unique Paths**

6. **Edit Distance**

7. **Maximum Product Subarray**

8. **Word Break**

9. **Decode Ways**

10. **Partition Equal Subset Sum**

🌐 9️⃣ Graphs

1. **Number of Islands**

2. **Clone Graph**

3. **Course Schedule**

4. **Pacific Atlantic Water Flow**

5. **Rotting Oranges**

6. **Word Ladder**

7. **Graph Valid Tree**

8. **Network Delay Time**

9. **Find Eventual Safe States**

10. **Number of Connected Components**

⚙️ 🔟 Heap / Priority Queue

1. **Kth Largest Element in an Array**

2. **Top K Frequent Elements**

3. **Merge K Sorted Lists**

4. **Find Median from Data Stream**

5. **Task Scheduler**

6. **Reorganize String**

7. **K Closest Points to Origin**

8. **Smallest Range Covering Elements from K Lists**

9. **Sliding Window Median**

10. **Ugly Number II**