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**