90% Companies ask the same DSA Problems

Sorting Algorithms

• Quick Sort

• Merge Sort

• Heap Sort

• Bubble Sort

• Insertion Sort

• Selection Sort

Searching Algorithms

• Binary Search

• Linear Search

Dynamic Programming (DP)

• Fibonacci Sequence

• Knapsack Problem

- Longest Common Subsequence

- Longest Increasing Subsequence

- Coin Change

- Edit Distance

- House Robber

- Palindromic Substring

- Partition Equal Subset Sum

Greedy Algorithms

- Activity Selection

- Huffman Coding

- Job Sequencing

- Fractional Knapsack

- Dijkstra's Algorithm

Graph Algorithms

- Depth-First Search (DFS)

- Breadth-First Search (BFS)

- Dijkstra's Algorithm

- Bellman-Ford Algorithm

- Kruskal's Algorithm

- Prim's Algorithm

- Topological Sort

- Floyd-Warshall Algorithm

- Union-Find Algorithm

Backtracking Algorithms

- N-Queens Problem

- Sudoku Solver

- Subset Sum Problem

- Rat in a Maze

- Word Search

- Permutations and Combinations

Divide and Conquer

• Merge Sort

• Quick Sort

• Binary Search

• Maximum Subarray Problem

String Algorithms

• KMP Algorithm

• Rabin-Karp Algorithm

• Longest Palindromic Substring

• Z Algorithm

• Trie Data Structure

Mathematical Algorithms

• Euclidean GCD Algorithm

• Modular Exponentiation

• Fibonacci Numbers using Matrix Exponentiation

Tree and Binary Tree Algorithms

• Binary Tree Traversals

• Lowest Common Ancestor (LCA)

• Binary Search Tree (BST) Operations

• Diameter of a Binary Tree

• Level Order Traversal

• Serialize and Deserialize Binary Tree

• Maximum Path Sum

• Traversals and Views of Trees

Linked List Algorithms

• Reverse a Linked List

• Detect Cycle in a Linked List

• Merge Two Sorted Linked Lists

• Intersection Point of Two Linked Lists

Heap/Priority Queue Algorithms

• Kth Largest Element

• Merge K Sorted Lists

• Find Median from Data Stream

Bit Manipulation Algorithms

• Power of 2

• Count Set Bits

• Find Non-Repeating Element

• XOR Problems

Miscellaneous

• Sliding Window Technique

• Two Pointer Technique

- Tortoise and Hare Algorithm

- Reservoir Sampling

- Monotonic Stack