

ARRAYS & LISTS

- Two Sum - 1
- Best Time to Buy and Sell Stock - 121
- Contains Duplicate - 217
- Product of Array Except Self - 238
- 3Sum - 15
- Longest Substring Without Repeating Characters - 3

LINKED STRUCTURES & LINEAR DS

- Reverse Linked List - 206
- Merge Two Sorted Lists - 21
- Linked List Cycle - 141
- Copy List with Random Pointer - 138
- Valid Parentheses - 20
- Min Stack - 155
- Sliding Window Maximum - 239

GRAPH TRAVERSALS & SHORTEST-PATH

- Flood Fill (Grid DFS/BFS) - 200. Number of Islands; 130. Surrounded Regions
- DFS & BFS (General Graph) - 101. Symmetric Tree; 133. Clone Graph; 785. Is Graph Bipartite?
- Topological Sort - 207. Course Schedule; 210. Course Schedule II
- Dijkstra's Algorithm - 743. Network Delay Time; 787. Cheapest Flights Within K Stops
- Bellman-Ford Algorithm - 743. Network Delay Time; 787. Cheapest Flights Within K Stops
- Floyd-Warshall Algorithm - 547. Number of Provinces;
- Shortest Path in a DAG - 329. Longest Increasing Path in a Matrix; 787.

TWO-POINTER, SLIDING WINDOW & PREFIX SUM

- **Two Pointers** - 88. Merge Sorted Array; 167. Two Sum II - Input Array Is Sorted; 15. 3Sum
- **Sliding Window** - 3. Longest Substring Without Repeating Characters; 76. Minimum Window Substring; 209. Minimum Size Subarray Sum
- **Prefix Sum & Difference Array** - 560. Subarray Sum Equals K; 238. Product of Array Except Self; 304. Range Sum Query 2D - Immutable; 370. Range Addition

BACKTRACKING & DYNAMIC PROGRAMMING

- **KMP Algorithm** - 28. Find the Index of the First Occurrence in a String; 214. Shortest Palindrome
- **Rabin-Karp Algorithm** - 28. Find the Index of the First Occurrence in a String; 466. Count The Repetitions
- **Manacher's Algorithm** - 5. Longest Palindromic Substring; 132. Palindrome Partitioning II
- **Backtracking** - 51. N-Queens; 79. Word Search; 46. Permutations; 39. Combination Sum
- **Dynamic Programming on Subsets** - 416. Partition Equal Subset Sum; 494. Target Sum; 698. Partition to K Equal Sum Subsets
- **Dynamic Programming on Strings** - 1143. Longest Common Subsequence
- **Dynamic Programming on Grids** - 62. Unique Paths; 63. Unique Paths II; 64. Minimum Path Sum
- **Bitmask + DP** - 698. Partition to K Equal Sum Subsets; 887. Super Egg Drop; 299. Bulls and Cows

DATA STRUCTURES & CORE TECHNIQUES

- **Hashing** - 1. Two Sum; 217. Contains Duplicate
- **Heap / Priority Queue** - 23. Merge k Sorted Lists; 215. Kth Largest Element in an Array
- **Union-Find / Disjoint Set Union** - 200. Number of Islands; 547
- **Segment Tree** - 307. Range Sum Query - Mutable
- **Fenwick Tree / Binary Indexed Tree** - 307. Range Sum Query - Mutable
- **Trie** - 208. Implement Trie (Prefix Tree); 212. Word Search II
- **Suffix Array & LCP Array** - 187. Repeated DNA Sequences
- **Bit Manipulation** - 136. Single Number; 190. Reverse Bits

TREES & GRAPHS

- Maximum Depth of Binary Tree - 104
- Binary Tree Inorder Traversal - 94
- Validate Binary Search Tree - 98
- Lowest Common Ancestor(BST) - 235
- Number of Islands - 200
- Course Schedule - 207

ADVANCED PATTERNS

- Climbing Stairs - 70
- House Robber - 198
- Coin Change - 322
- Longest Increasing Subsequence - 300

- Word Break - 139
- Subsets - 78
- Permutations - 46
- Combination Sum - 39
- Assign Cookies - 455
- Meeting Rooms II - 253
- Top K Frequent Elements - 347

All 25 Algorithms

SEARCHING

1. Linear Search.
2. Binary Search.
3. Depth First Search.
4. Breadth First Search.

SORTING

1. Insertion Sort.
2. Heap Sort.
3. Selection Sort.
4. Merge Sort.
5. Quick Sort.
6. Counting Sort

GRAPHS

1. Kruskal's Algo.
2. Dijkstra's Algo.
3. Bellman Ford Algo.
4. Floyd Warshall Algo.
5. Topological Sort Algo.
6. Flood Fill Algo
7. Lee Algo

ARRAYS

1. Kadane's Algo.
2. Floyd's Cycle Detection Algo.
3. KMP Algo.
4. Quick Select Algo.
5. Boyer - More Majority Vote Algo.

BASICS

1. Huffman Coding Compression Algo.
2. Euclid's Algo.
3. Union Find Algo

YOUTUBE RESOURCES

1. Web Development

<https://www.youtube.com/@CodeWithHarry/playlists>

<https://www.youtube.com/@CleverProgrammer/playlists>

<https://www.youtube.com/@wscubetech/playlists>

2. DSA

https://www.youtube.com/watch?v=AT14lCXuMKI&list=PLdo5W4Nhv31bbKJzrsKfMpo_grxuLl8LU

https://www.youtube.com/watch?v=5_5oE5lgrhw&list=PLu0W_9lII9ahIappRPN0MCAgtOu3lQjQi