

# **Target India – DSA Preparation List (1–3 Years Experience)**

## **Arrays & Strings**

- Two Sum, Best Time to Buy and Sell Stock
- Kadane's Algorithm (Maximum Subarray)
- Sliding Window problems
- String manipulation and anagrams

## **Hashing**

- Frequency counting using HashMap
- Longest substring without repeating characters
- Two Sum using HashMap

## **Linked List**

- Reverse a linked list
- Detect cycle in linked list
- Merge two sorted linked lists

## **Stack & Queue**

- Valid Parentheses
- Next Greater Element
- Implement Stack/Queue using arrays

## **Trees**

- Binary Tree traversals (Inorder, Preorder, Postorder)
- Height and diameter of a tree
- Lowest Common Ancestor

## **Graphs**

- BFS and DFS
- Detect cycle in graph
- Number of islands

## **Searching & Sorting**

- Binary Search
- Merge Sort and Quick Sort basics
- Search in rotated sorted array

## **Dynamic Programming (Basics)**

- Climbing Stairs
- House Robber
- Longest Common Subsequence (basic understanding)