CP-CS1-M

Hashing

0. Implement Map / Collision Handling Techniques

1. **Two Sum (Easy)**

2. Length of the longest substring without repeating characters (Medium)

3. **Find the smallest window in a string containing all characters of another string (Hard)**

4. Design a data structure that supports insert, delete, search and getRandom in constant time (Medium to hard)

5. **Tree Traversal such as vertical traversal, top, bottom,**

etc using Maps.

Dynamic Programming

1. Coin Exchange Problem
2. Longest Common Substring
3. Longest Common Subsequence
4. Edit Distance
5. 0 - 1 Knapsack problem
6. Min sum path in the matrix
7. Unique Paths using DP

8. Climbing Stairs

9. Min Jumps to reach end

10. Maximum-sum-such-that-no-two-elements-are-adjacent

11. Longest palindromic subsequence