

DP Sheet By Shivam Bhadani

Conceptual Problems

- 0 - 1 Knapsack Problem
- Target Sum
- Coin Change
- Partition Equal Subset Sum
- Reducing Dishes
- Rod Cutting

- Unique Paths
- Unique Paths II
- Dungeon Game

- Longest Increasing Subsequence
- Box Stacking
- Russian Doll Envelopes

- Longest Common Subsequence
- Longest Common Substring
- Longest Common Supersequence
- Minimum number of deletions and insertions
- LCS of three strings

- Consecutive 1's not allowed
- Count possible ways to construct buildings
- Count subsequences of type a^i, b^j, c^k
- Number of Ways to Paint $N \times 3$ Grid

- Best Time to Buy and Sell Stock
- Best Time to Buy and Sell Stock II
- Best Time to Buy and Sell Stock with Transaction Fee
- Best Time to Buy and Sell Stock with Cooldown
- Best Time to Buy and Sell Stock III
- Best Time to Buy and Sell Stock IV

- Matrix Chain Multiplication
- Palindrome Partitioning
- Scramble String
- Boolean Parenthesization

Now Go to CSES Problem Set (<https://cses.fi/problemset/>) and Solve all dp problems.

You can find solutions here -

<https://github.com/shivam-bhadani/Competitive-Programming/tree/master/CSES/Dynamic%20Programming>

BitMask DP

- Minimum Number of Work Sessions to Finish the Tasks
- Partition to K Equal Sum Subsets
- U - Grouping
- COURIER - The Courier
- BABY - Baby
- HELPBOB - Help Bob

Digit DP

- PR003004 - Digit Sum
- Count of Integers
- Unlucky Numbers

Meet-in-the-middle

- Closest Subsequence Sum
- Partition Array Into Two Arrays to Minimize Sum Difference

Practice Problems

Leetcode Medium

- Ugly Number II
- Super Ugly Number
- Minimum Score Triangulation of Polygon
- Fair Distribution of Cookies
- Maximum Number of Points with Cost

Leetcode Hard

- Wildcard Matching
- Regular Expression Matching
- Maximum Profit in Job Scheduling
- Edit Distance
- Burst Balloons

- Tallest Billboard
- Student Attendance Record II
- Number of Increasing Paths in a Grid
- Paths in Matrix Whose Sum Is Divisible by K
- Super Egg Drop
- Number of Music Playlists
- Minimum Cost to Merge Stones
- Number of Ways to Wear Different Hats to Each Other

CP Problems

https://atcoder.jp/contests/abc240/tasks/abc240_c
<https://codeforces.com/problemset/problem/1739/C>
<https://codeforces.com/problemset/problem/1765/K>
<https://codeforces.com/problemset/problem/1547/E>
<https://codeforces.com/problemset/problem/1678/B2>
<https://codeforces.com/problemset/problem/1677/A>
<https://codeforces.com/problemset/problem/1633/D>
<https://codeforces.com/problemset/problem/1398/C>
<https://codeforces.com/contest/1741/problem/E>
<https://codeforces.com/contest/1740/problem/E>
<https://codeforces.com/problemset/problem/1787/C>
<https://codeforces.com/contest/1703/problem/G>
<https://codeforces.com/contest/1061/problem/C>
https://atcoder.jp/contests/abc248/tasks/abc248_c
https://atcoder.jp/contests/abc247/tasks/abc247_c
https://atcoder.jp/contests/abc242/tasks/abc242_c
<https://codeforces.com/problemset/problem/1749/D>
<https://codeforces.com/problemset/problem/895/C>
<https://codeforces.com/problemset/problem/1778/D>
<https://codeforces.com/problemset/problem/1799/D1>
<https://codeforces.com/contest/1716/problem/D>

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