

450 DSA Cracker

Topics (/) / Dynamic Programming

Serial No.	Questions
1	Coin ChangeProblem (https://practice.geeksforgeeks.org/problems/coin-change2448/1)
2	Knapsack Problem (https://practice.geeksforgeeks.org/problems/0-1-knapsack-problem/0)
3	Binomial CoefficientProblem (https://practice.geeksforgeeks.org/problems/ncr1019/1)
4	Permutation CoefficientProblem (https://www.geeksforgeeks.org/permutation-coefficient/)
5	Program for nth Catalan Number (https://www.geeksforgeeks.org/program-nth-catalan-number/)
6	Matrix Chain Multiplication (https://www.geeksforgeeks.org/matrix-chain-multiplication-dp-8/)
7	Edit Distance (https://practice.geeksforgeeks.org/problems/edit-distance3702/1)
8	Subset Sum Problem (https://practice.geeksforgeeks.org/problems/subset-sum-problem2014/1)
9	Friends Pairing Problem (https://practice.geeksforgeeks.org/problems/friends-pairing-problem5425/1)
10	Gold Mine Problem (https://www.geeksforgeeks.org/gold-mine-problem/)
11	Assembly Line SchedulingProblem (https://www.geeksforgeeks.org/assembly-line-scheduling-dp-34/)
12	Painting the Fenceproblem (https://practice.geeksforgeeks.org/problems/painting-the-fence3727/1)
13	Maximize The Cut Segments (https://practice.geeksforgeeks.org/problems/cutted-segments/0)

Serial No.	Questions
14	Longest Common Subsequence (https://practice.geeksforgeeks.org/problems/longest-common-subsequence/0)
15	Longest Repeated Subsequence (https://practice.geeksforgeeks.org/problems/longest-repeating-subsequence/0)
16	Longest Increasing Subsequence (https://practice.geeksforgeeks.org/problems/longest-increasing-subsequence/0)
17	Space Optimized Solution of LCS (https://www.geeksforgeeks.org/space-optimized-solution-lcs/)
18	LCS (Longest Common Subsequence) of three strings (https://practice.geeksforgeeks.org/problems/lcs-of-three-strings/0)
19	Maximum Sum Increasing Subsequence (https://practice.geeksforgeeks.org/problems/maximum-sum-increasing-subsequence4749/1)
20	Count all subsequences having product less than K (https://www.geeksforgeeks.org/count-subsequences-product-less-k/)
21	Longest subsequence such that difference between adjacent is one (https://practice.geeksforgeeks.org/problems/longest-subsequence-such-that-difference-between-adjacents-is-one4724/1)
22	Maximum subsequence sum such that no three are consecutive (https://www.geeksforgeeks.org/maximum-subsequence-sum-such-that-no-three-are-consecutive/)
23	Egg Dropping Problem (https://practice.geeksforgeeks.org/problems/egg-dropping-puzzle/0)
24	Maximum Length Chain of Pairs (https://practice.geeksforgeeks.org/problems/max-length-chain/1)
25	Maximum size square sub-matrix with all 1s (https://practice.geeksforgeeks.org/problems/largest-square-formed-in-a-matrix/0)
26	Maximum sum of pairs with specific difference (https://practice.geeksforgeeks.org/problems/pairs-with-specific-difference/0)
27	Min Cost Path Problem (https://practice.geeksforgeeks.org/problems/path-in-matrix3805/1)
28	Maximum difference of zeros and ones in binary string (https://practice.geeksforgeeks.org/problems/maximum-difference-of-zeros-and-ones-in-binary-string4111/1)

Serial No.	Questions
29	Minimum number of jumps to reach end (https://practice.geeksforgeeks.org/problems/minimum-number-of-jumps/0)
30	Minimum cost to fill given weight in a bag (https://practice.geeksforgeeks.org/problems/minimum-cost-to-fill-given-weight-in-a-bag1956/1)
31	Minimum removals from array to make $\max - \min \leq K$ (https://www.geeksforgeeks.org/minimum-removals-array-make-max-min-k/)
32	Longest Common Substring (https://practice.geeksforgeeks.org/problems/longest-common-substring/0)
33	Count number of ways to reach a given score in a game (https://practice.geeksforgeeks.org/problems/reach-a-given-score/0)
34	Count Balanced Binary Trees of Height h (https://practice.geeksforgeeks.org/problems/bbt-counter/0)
35	Largest Sum Contiguous Subarray [V>V>V>V IMP] (https://practice.geeksforgeeks.org/problems/kadanes-algorithm/0)
36	Smallest sum contiguous subarray (https://www.geeksforgeeks.org/smallest-sum-contiguous-subarray/)
37	Unbounded Knapsack (Repetition of items allowed) (https://practice.geeksforgeeks.org/problems/knapsack-with-duplicate-items4201/1)
38	Word Break Problem (https://practice.geeksforgeeks.org/problems/word-break/0)
39	Largest Independent Set Problem (https://www.geeksforgeeks.org/largest-independent-set-problem-dp-26/)
40	Partition problem (https://practice.geeksforgeeks.org/problems/subset-sum-problem2014/1)
41	Longest Palindromic Subsequence (https://www.geeksforgeeks.org/longest-palindromic-subsequence-dp-12/)
42	Count All Palindromic Subsequence in a given String (https://practice.geeksforgeeks.org/problems/count-palindromic-subsequences/1)
43	Longest Palindromic Substring (https://leetcode.com/problems/longest-palindromic-substring/)
44	Longest alternating subsequence (https://practice.geeksforgeeks.org/problems/longest-alternating-subsequence/0)



Serial No.	Questions
45	Weighted Job Scheduling (https://www.geeksforgeeks.org/weighted-job-scheduling/)
46	Coin game winner where every player has three choices (https://www.geeksforgeeks.org/coin-game-winner-every-player-three-choices/)
47	Count Derangements (Permutation such that no element appears in its original position) [IMPORTANT] (https://www.geeksforgeeks.org/count-derangements-permutation-such-that-no-element-appears-in-its-original-position/)
48	Maximum profit by buying and selling a share at most twice [IMP] (https://www.geeksforgeeks.org/maximum-profit-by-buying-and-selling-a-share-at-most-twice/)
49	Optimal Strategy for a Game (https://practice.geeksforgeeks.org/problems/optimal-strategy-for-a-game/0)
50	Optimal Binary Search Tree (https://www.geeksforgeeks.org/optimal-binary-search-tree-dp-24/)
51	Palindrome Partitioning Problem (https://practice.geeksforgeeks.org/problems/palindromic-partitioning4845/1)
52	Word Wrap Problem (https://practice.geeksforgeeks.org/problems/word-wrap/0)
53	Mobile Numeric Keypad Problem [IMP] (https://practice.geeksforgeeks.org/problems/mobile-numeric-keypad5456/1)
54	Boolean Parenthesization Problem (https://practice.geeksforgeeks.org/problems/boolean-parenthesization/0)
55	Largest rectangular sub-matrix whose sum is 0 (https://www.geeksforgeeks.org/largest-rectangular-sub-matrix-whose-sum-0/)
56	Largest area rectangular sub-matrix with equal number of 1's and 0's [IMP] (https://www.geeksforgeeks.org/largest-area-rectangular-sub-matrix-equal-number-1s-0s/)
57	Maximum sum rectangle in a 2D matrix (https://practice.geeksforgeeks.org/problems/maximum-sum-rectangle/0)
58	Maximum profit by buying and selling a share at most k times (https://practice.geeksforgeeks.org/problems/maximum-profit4657/1)
59	Find if a string is interleaved of two other strings (https://practice.geeksforgeeks.org/problems/interleaved-strings/1)
60	Maximum Length of Pair Chain (https://leetcode.com/problems/maximum-length-of-pair-chain/)

