ALGORITHM + QUESTIONS + VIDEO	QUESTION LINK	DONE / NOT DONE

NOTE - CLICK ON THE QUESTION TO REFER TO IT'S VIDEO SOLUTION

STL

Title	Link
STL Introduction	https://www.geeksforgeeks.org/the-c-standard-template-library-stl/
First Unique Character In A String	https://leetcode.com/problems/first-unique-character-in-a-string/
Kth Largest Element	https://leetcode.com/problems/kth-largest-element-in-an-array/
One Integer	https://binarysearch.com/problems/One-Integer
Maximum Score From Removing Stones	https://leetcode.com/problems/maximum-score-from-removing-stones/
Find K Closest Elements	https://leetcode.com/problems/find-k-closest-elements/
Distinct Candies	https://leetcode.com/problems/distribute-candies/
Bulls And Cows	https://leetcode.com/problems/bulls-and-cows/
Smallest Range Covering Elements From K Lists	https://leetcode.com/problems/smallest-range-covering-elements-from-k-lists/

HASHING

Title	Link
Hashing Introduction	https://www.geeksforgeeks.org/hashing-set-1-introduction/
Two Sum III - Data Structure Design	https://www.lintcode.com/en/old/problem/two-sum-iii-data-structure-design/
Find Subsequence of Length K With the Largest Sum	https://leetcode.com/problems/find-subsequence-of-length-k-with-the-largest-sum/
Avoid Flood in The City	https://leetcode.com/problems/avoid-flood-in-the-city/
Count Good Meals	https://leetcode.com/problems/count-good-meals/
Ugly Number II	https://leetcode.com/problems/ugly-number-ii/
Word Ladder II	https://leetcode.com/problems/word-ladder-ii/
Word Break II	https://leetcode.com/problems/word-break-ii/
Find Longest Awesome Substring	https://leetcode.com/problems/find-longest-awesome-substring/
Jump Game IV	https://leetcode.com/problems/jump-game-iv/
LFU Cache	https://leetcode.com/problems/lfu-cache/

BIT MANIPULATION

Title	Link
All about Bit Manipulation	https://www.geeksforgeeks.org/all-about-bit-manipulation/
Power Of Two	https://leetcode.com/problems/power-of-two/
Power Of Four	https://leetcode.com/problems/power-of-four/
Decode XORed Array	https://leetcode.com/problems/decode-xored-array/
Count Bits	https://leetcode.com/problems/counting-bits/
Sort Integers By The Number Of 1 Bits	https://leetcode.com/problems/sort-integers-by-the-number-of-1-bits/
Longest Consecutive Run Of 1s in Binary	https://leetcode.com/problems/max-consecutive-ones/
Hamming Distance	https://leetcode.com/problems/hamming-distance/
Unique Number II	https://leetcode.com/problems/single-number-ii/
Unique Number III	https://leetcode.com/problems/single-number-iii/
Find Subsets	https://leetcode.com/problems/subsets/
Maximum Score Words Formed By Letters	https://leetcode.com/problems/maximum-score-words-formed-by-letters/
Triples with Bitwise AND Equal To Zero	https://leetcode.com/problems/triples-with-bitwise-and-equal-to-zero/
Bitwise AND of Numbers Range	https://leetcode.com/problems/bitwise-and-of-numbers-range/
Total Hamming Distance	https://leetcode.com/problems/total-hamming-distance/
Travelling Salesman Problem	https://www.geeksforgeeks.org/travelling-salesman-problem-set-1/
Decode XORed Permutation	https://leetcode.com/problems/decode-xored-permutation/
Find the Shortest Superstring	https://leetcode.com/problems/find-the-shortest-superstring/

LARGE NUMBERS

Title	Link
Big Integers Introduction	https://www.geeksforgeeks.org/bigint-big-integers-in-c-with-example/
Big Addition	https://leetcode.com/problems/add-to-array-form-of-integer/
Big Multiplication	https://leetcode.com/problems/multiply-strings/
Big Factorials	https://practice.geeksforgeeks.org/problems/factorials-of-large-numbers2508/1/
Big Integer Challenge - Julka	https://www.spoj.com/problems/JULKA/cstart=190

RECURRENCE

Title	Link
Analysis of Algorithms (Solving Recurrences)	https://www.geeksforgeeks.org/analysis-algorithm-set-4-master-method-solving-recurrences/
Matrix Exponentiation Introduction	https://www.geeksforgeeks.org/matrix-exponentiation/
Pow(x, n) - Binary Exponentiation	https://leetcode.com/problems/powx-n/
Maximize Number of Nice Divisors - Modular Binary Exponentiation	https://leetcode.com/problems/maximize-number-of-nice-divisors/
Open The Lock	https://leetcode.com/problems/open-the-lock/
Fibonacci Number - Fast Matrix Multiplication	https://leetcode.com/problems/fibonacci-number/
Strange Function	https://codeforces.com/problemset/problem/1542/C
N-th Tribonacci Number	https://leetcode.com/problems/n-th-tribonacci-number/

PIGEONHOLE

Title	Link
Pigeonhole Principle Introduction	https://www.geeksforgeeks.org/discrete-mathematics-the-pigeonhole-principle/
Maximum Gap	https://leetcode.com/problems/maximum-gap/
DIVSUB	https://www.codechef.com/problems/DIVSUB
Array With Elements Not Equal to Average of Neighbors	https://leetcode.com/problems/array-with-elements-not-equal-to-average-of-neighbors/
The Gray-Similar Code	https://www.codechef.com/problems/GRAYSC
HOLI - Holiday Accommodation	https://www.spoj.com/problems/HOLI/
Subarray Sums Divisible by K	https://leetcode.com/problems/subarray-sums-divisible-by-k/

PROBABILITY

Title	Link
Probability Theory Introduction	https://www.geeksforgeeks.org/probability-theory/
Linearity Of Expectation	https://leetcode.com/discuss/interview-question/660948/Citadel-or-Quant-Researcher-Phone-Interview/827645
Expected Throws - One Head	https://www.codechef.com/wiki/tutorial-expectation
Expected Throws - Two Consecutive Heads	https://www.codechef.com/wiki/tutorial-expectation
Expected Throws - N Consecutive Heads	https://www.codechef.com/wiki/tutorial-expectation
Bernoulli's Trial	https://leetcode.com/problems/coin-change-2/
Coupon Collector	https://www.cantorsparadise.com/the-coupon-collector-problem-c0afba1c98a0
Bob and Pallindromes	https://www.codechef.com/problems/PALLIND
Second Player	https://www.codechef.com/problems/SECPLAYER

INCLUSION-EXCLUSION

Title	Link
Inclusion-Exclusion Principle	https://www.geeksforgeeks.org/inclusion-exclusion-principle-and-programming-applications/
Count Number of Divisors till N	https://www.geeksforgeeks.org/count-divisors-n-on13/
Divisibility Rule	https://www.geeksforgeeks.org/divisibility-rules/

PRIME NUMBERS

Title	Link
Prime Sieve	https://www.geeksforgeeks.org/sieve-of-eratosthenes/
Prime Queries	https://www.hackerearth.com/problem/algorithm/prime-queries-14/
Prime Factorisation - O(N)	https://www.geeksforgeeks.org/print-all-prime-factors-of-a-given-number/
Prime Factorisation - O(√N)	https://www.geeksforgeeks.org/print-all-prime-factors-of-a-given-number/
Prime Factorisation - O(LogN)	https://www.geeksforgeeks.org/prime-factorization-using-sieve-olog-n-multiple-queries/
Count Primes	https://leetcode.com/problems/count-primes/
Prime Arrangements - Segmented Sieve	https://leetcode.com/problems/prime-arrangements/
Alice and Candies	https://www.hackerearth.com/practice/math/number-theory/basic-number-theory-1/practice-problems/algorithm/lola-and-candies-36b57b1b/
Prime Sum	https://www.interviewbit.com/problems/prime-sum/
Closest Divisors	https://leetcode.com/problems/closest-divisors/

EUCLIDEAN

Title	Link
Greatest Common Divisor	https://practice.geeksforgeeks.org/problems/lcm-and-gcd4516/1/
Extended Euclidean Algorithm (Base + Extended)	https://practice.geeksforgeeks.org/problems/required-rooms3939/1/
Modular Multiplicative Inverse	https://practice.geeksforgeeks.org/problems/modular-multiplicative-inverse-1587115620/1
Linear Diophantine Equation	https://practice.geeksforgeeks.org/problems/linear-diophantine-equations5649/1/
Co-prime divisor of a Number	https://www.geeksforgeeks.org/coprime-divisors-of-a-number/
Nastya Studies Informatics	https://codeforces.com/problemset/problem/992/B
Row GCD	https://codeforces.com/problemset/problem/1458/A

NUMBER THEORY

Title	Link
Modular Arithmetic	https://www.geeksforgeeks.org/modular-arithmetic/
Fermat's Theorem	https://www.geeksforgeeks.org/fermats-little-theorem/
Count (N!) % P -------> (N factorial Modulo P)	https://www.geeksforgeeks.org/compute-n-under-modulo-p/
Count (nCr) % P -------> (r Combinations of n Modulo P)	https://www.geeksforgeeks.org/compute-ncr-p-set-3-using-fermat-little-theorem/
Check If Array Is Good	https://leetcode.com/problems/check-if-it-is-a-good-array/
Remainder's Game	https://codeforces.com/problemset/problem/687/B

COMBINATORICS

Title	Link
Combinatorics Basics	https://www.geeksforgeeks.org/mathematics-combinatorics-basics/
Binomial Coefficients	https://www.geeksforgeeks.org/binomial-coefficient-dp-9/

Problem	Link
Selection of Personnel	https://codeforces.com/problemset/problem/630/F
The World is a Theatre	https://codeforces.com/problemset/problem/131/C
Permutations & Combinations Formulas	https://www.geeksforgeeks.org/permutations-and-combinations-formulas/
Birthday Paradox	https://www.geeksforgeeks.org/birthday-paradox/
Catalan Numbers	https://www.geeksforgeeks.org/program-nth-catalan-number/
The Skyline Problem	https://leetcode.com/problems/the-skyline-problem/
Count the Arrays	https://www.hackerearth.com/practice/basic-programming/recursion/recursion-and-backtracking/practice-problems/algorithm/count-array-b31ab1e9/
Beautiful Numbers	https://www.hackerearth.com/problem/algorithm/beautiful-numbers-05de0f51-101121ca/

RECURSION

Problem	Link
Basics Of Recursion	https://www.geeksforgeeks.org/recursion/
Check if Array is Sorted	https://www.geeksforgeeks.org/program-check-array-sorted-not-iterative-recursive/
Ways to Tile a Floor	https://practice.geeksforgeeks.org/problems/ways-to-tile-a-floor5836/1/
Count Strings	https://www.hackerrank.com/challenges/count-strings/problem
Friend's Pairing Problem	https://www.geeksforgeeks.org/friends-pairing-problem/

BACKTRACKING

Problem	Link
Find Subsets	https://www.geeksforgeeks.org/backtracking-to-find-all-subsets/
Letter Combinations of a Phone Number	https://leetcode.com/problems/letter-combinations-of-a-phone-number/
Permutations using Backtracking	https://www.geeksforgeeks.org/write-a-c-program-to-print-all-permutations-of-a-given-string/
Print Combinations Of Balanced Paranthesis	https://www.geeksforgeeks.org/print-all-combinations-of-balanced-parentheses/
N-Queens	https://leetcode.com/problems/n-queens/
Target Sum	https://leetcode.com/problems/target-sum/
Sudoku Solver	https://leetcode.com/problems/sudoku-solver/
Palindrome Partitioning	https://leetcode.com/problems/palindrome-partitioning/
Check if Number is a Sum of Powers of Three	https://leetcode.com/problems/check-if-number-is-a-sum-of-powers-of-three/

BINARY SEARCH

Problem	Link
Lower Bound & Upper Bound using Binary Search	https://www.geeksforgeeks.org/binary-search-functions-in-c-stl-binary_search-lower_bound-and-upper_bound/
Place K elements such that Minimum distance is maximized	https://www.geeksforgeeks.org/place-k-elements-such-that-minimum-distance-is-maximized/
Game of Greed	https://www.codechef.com/problems/PTEST
Valid Perfect Square	https://leetcode.com/problems/valid-perfect-square/
Koko Eating Bananas	https://leetcode.com/problems/koko-eating-bananas/
Reorder Data in Log Files	https://leetcode.com/problems/reorder-data-in-log-files/
Closest Room	https://leetcode.com/problems/closest-room/
Noor and his Pond	https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/noor-and-his-pond-760eabe0/

DIVIDE & CONQUER

Problem	Link
Merge Sort	https://www.geeksforgeeks.org/merge-sort/
Quick Sort	https://www.geeksforgeeks.org/quick-sort/
Quick Select	https://www.geeksforgeeks.org/quickselect-algorithm/
Global and Local Inversions	https://leetcode.com/problems/global-and-local-inversions/
Sam Height	https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/alice-and-marks-hsbc-b18d5d01/
Reverse Pairs	https://leetcode.com/problems/reverse-pairs/
Ternary Search	https://www.geeksforgeeks.org/ternary-search/

GREEDY ALGORITHM

Problem	Link
Greedy Algorithms Basic	https://www.geeksforgeeks.org/greedy-algorithms-general-structure-and-applications/
Bulbs	https://thalaivar.github.io/posts/2021/03/30/greedy_prob1
Minimum Number of Taps to Open to Water a Garden	https://leetcode.com/problems/minimum-number-of-taps-to-open-to-water-a-garden/
Make It Equal	https://codeforces.com/problemset/problem/1065/C
Too Many Segments	https://codeforces.com/problemset/problem/1249/D2
Segment Intersections	https://www.geeksforgeeks.org/given-a-set-of-line-segments-find-if-any-two-segments-intersect/

MEET IN THE MIDDLE

Problem	Link
Meet in the Middle basics	https://www.geeksforgeeks.org/meet-in-the-middle/
Subsums	https://www.spoj.com/problems/SUBSUMS/
Range Queries Intro	https://www.geeksforgeeks.org/array-range-queries-for-searching-an-element/

SEGMENT TREE

Problem	Link
Segment Trees Intro & Implementation	https://www.geeksforgeeks.org/segment-tree-efficient-implementation/
Range XOR Queries	https://cses.fi/problemset/task/1650#:~:text=CSES%20%2D%20Range%20Xor%20Queries&text=Given%20an%20array%20of%20n,range%20%5Ba%2Cb%5D%3F&text=The%20first%20input%20line%20has,xn%3A%20the%20array%20values.
Range Minimum Queries	https://www.geeksforgeeks.org/segment-tree-set-1-range-minimum-query/
Xenia and Bit Operations	https://codeforces.com/problemset/problem/339/D
Petya and Array	https://codeforces.com/problemset/problem/1042/D#:~:text=Problem%20%2D%201042D%20%2D%20Codeforces&text=Petya%20has%20an%20array%20a,to%20another%20in%20the%20array.
Array Stabilization	https://codeforces.com/problemset/problem/1095/B

LAZY PROPAGATION

Problem	Link
Lazy Propagation in Segment Tree	https://www.geeksforgeeks.org/lazy-propagation-in-segment-tree/
Flipping Coins	https://www.codechef.com/problems/FLIPCOIN
XOR on Segment	https://codeforces.com/problemset/problem/242/E

FENWICK TREE

Problem	Link
Fenwick Tree Intro	https://www.geeksforgeeks.org/binary-indexed-tree-or-fenwick-tree-2/
Inversion Count using Fenwick Tree	https://www.geeksforgeeks.org/count-inversions-array-set-3-using-bit/
Range Update Queries	https://cses.fi/problemset/task/1651
Count of Smaller Numbers After Self	https://leetcode.com/problems/count-of-smaller-numbers-after-self/
Range Set Query	https://atcoder.jp/contests/abc174/tasks/abc174_f
Longest Increasing Subsequence using Fenwick Tree	https://iq.opengenus.org/longest-increasing-subsequence-fenwick-tree/

SQRT DECOMPOSITION

Problem	Link
Square Root Decomposition Introduction	https://www.geeksforgeeks.org/sqrt-square-root-decomposition-technique-set-1-introduction/
Range Minimum Query using Square Root Decomposition	https://iq.opengenus.org/range-minimum-query-square-root-decomposition/
DQUERY SPOJ using MO's Algorithm	https://www.spoj.com/problems/DQUERY/
Sorting Queries using MO's Algorithm	https://codeforces.com/blog/entry/61203
Little Elephant and Array	https://codeforces.com/problemset/problem/221/D
Powerful Array	https://codeforces.com/problemset/problem/86/D

GAME THEORY

Problem	Link
Combinatorial Games Introduction	https://www.geeksforgeeks.org/introduction-to-combinatorial-game-theory/
Take Away Games	https://www.geeksforgeeks.org/optimal-strategy-for-a-game-dp-31/
Game of Nim	https://www.geeksforgeeks.org/combinatorial-game-theory-set-2-game-nim/
Divisor Game	https://www.geeksforgeeks.org/optimal-strategy-for-the-divisor-game-using-dynamic-programming/
Sprague-Grundy	https://www.geeksforgeeks.org/combinatorial-game-theory-set-4-sprague-grundy-theorem/
Lucky Number Game	https://www.codechef.com/problems/HP18
Maximum Number of Coins	https://leetcode.com/problems/maximum-number-of-coins-you-can-get/

GAME OF NIM

Problem	Link
Game of Bullets	https://www.codechef.com/problems/BULLETS
Nim Game II	https://cses.fi/problemset/task/1098
Stair Game	https://cses.fi/problemset/task/1099

GRAPH THEORY

Problem	Link
Graphs Introduction	https://www.geeksforgeeks.org/graph-and-its-representations/
Breadth-First Search	https://www.geeksforgeeks.org/breadth-first-search-or-bfs-for-a-graph/
Depth-First Search	https://www.geeksforgeeks.org/depth-first-search-or-dfs-for-a-graph/
Astronaut Pairs	https://www.hackerrank.com/contests/alcoding-summer-challenge/challenges/astronaut-pairs
Reconstruct Itinerary	https://www.lintcode.com/problem/1288/
Shortest path faster algorithm	https://www.geeksforgeeks.org/shortest-path-faster-algorithm/
Board Game	https://leetcode.com/discuss/interview-question/366154/Google-or-Onsite-or-Board-Game
Message Route	https://cses.fi/problemset/task/1667
Word Ladder	https://leetcode.com/problems/word-ladder/
Valid BFS?	https://codeforces.com/problemset/problem/1037/D

TREE

Problem	Link
Tree Introduction	https://www.geeksforgeeks.org/introduction-to-tree-data-structure/
DFS on Trees	https://www.geeksforgeeks.org/dfs-traversal-of-a-tree-using-recursion/
Subtree of another Tree	https://leetcode.com/problems/subtree-of-another-tree/
Cut 'em all!	https://codeforces.com/problemset/problem/982/C
DFS Trees and Backedges	https://www.geeksforgeeks.org/tree-back-edge-and-cross-edges-in-dfs-of-graph/

Topic	Link
Lowest Common Ancestor Introduction	https://www.geeksforgeeks.org/lowest-common-ancestor-binary-tree-set-1/
LCA using Binary Lifting	https://www.geeksforgeeks.org/lca-in-a-tree-using-binary-lifting-technique/
LCA of a Binary Tree Problem	https://leetcode.com/problems/lowest-common-ancestor-of-a-binary-tree/
Distance Queries	https://cses.fi/problemset/task/1135
Path XOR	https://www.geeksforgeeks.org/xor-of-path-between-any-two-nodes-in-a-binary-tree/
Maximum Path	https://www.geeksforgeeks.org/find-maximum-path-sum-in-a-binary-tree/

ADVANCED GRAPHS

Topic	Link
Topological Sort	https://leetcode.com/problems/course-schedule/
Restricted Permutation	https://www.geeksforgeeks.org/what-is-restricted-permutation/#:~:text=The%20common%20types%20of%20restricted%20permutations%20are%3A&text=Formation%20of%20numbers%20with%20digits,of%20objects%20that%20never%20occur
Game Routes	https://cses.fi/problemset/task/1681
Find Critical and Pseudo-Critical Edges in Minimum Spanning Tree	https://leetcode.com/problems/find-critical-and-pseudo-critical-edges-in-minimum-spanning-tree/
Minimum Number of Days to Disconnect Island	https://leetcode.com/problems/minimum-number-of-days-to-disconnect-island/
Condensed Component Graph	https://cp-algorithms.com/graph/strongly-connected-components.html
Maximum Number of Non-Overlapping Substrings - Kosaraju	https://leetcode.com/problems/maximum-number-of-non-overlapping-substrings/
Connecting Cities with Minimum Cost	https://leetcode.ca/all/1135.html
GCD on Directed Graph	https://www.hackerearth.com/practice/algorithms/graphs/strongly-connected-components/practice-problems/algorithm/gcd-on-directed-graph-1122228a/

DISJOINT SET UNION

Topic	Link
DSU Introduction	https://www.geeksforgeeks.org/disjoint-set-data-structures/
Union-Find	https://www.geeksforgeeks.org/union-find/
Number of Operations to Make Network Connected	https://leetcode.com/problems/number-of-operations-to-make-network-connected/
Union By Rank & Path Compression	https://www.geeksforgeeks.org/union-find-algorithm-set-2-union-by-rank/
Make Palindrome	https://codeforces.com/problemset/problem/600/C
Sum of Maximum Weights	https://atcoder.jp/contests/abc214/tasks/abc214_d
GCD Sort of an Array	https://leetcode.com/problems/gcd-sort-of-an-array/
Special Paths	https://www.hackerearth.com/practice/algorithms/searching/binary-search/practice-problems/algorithm/special-path-b3ac37d0/

SPANNING TREE

Topic	Link
Prim's Algorithm	https://www.geeksforgeeks.org/prims-minimum-spanning-tree-mst-greedy-algo-5/
Kruskal's Algorithm	https://www.geeksforgeeks.org/kruskals-minimum-spanning-tree-algorithm-greedy-algo-2/
Minimum Spanning Tree Cost	https://www.geeksforgeeks.org/minimum-spanning-tree-cost-of-given-graphs/
Remove Max Number of Edges to Keep Graph Fully Traversable	https://leetcode.com/problems/remove-max-number-of-edges-to-keep-graph-fully-traversable/
Make It Connected	https://codeforces.com/problemset/problem/1095/F
Build Roads	https://www.hackerearth.com/practice/algorithms/graphs/minimum-spanning-tree/practice-problems/algorithm/rebuild/
Ring Minimum Spanning Tree	https://atcoder.jp/contests/abc210/tasks/abc210_e

SHORTEST PATH

Topic	Link
Dijkstra's Algorithm	https://www.geeksforgeeks.org/dijkstras-shortest-path-algorithm-greedy-algo-7/
Network Delay Time	https://leetcode.com/problems/network-delay-time/
Bellman Ford Algorithm	https://www.geeksforgeeks.org/bellman-ford-algorithm-dp-23/
Floyd Warshall Agorithm	https://www.geeksforgeeks.org/floyd-warshall-algorithm-dp-16/
Cheapest Flights Within K Stops	https://leetcode.com/problems/cheapest-flights-within-k-stops/
Travel by Car	https://leetcode.com/problems/car-pooling/
Break Up	https://codeforces.com/problemset/problem/700/C

DYNAMIC PROGRAMMING

Topic	Link
Dynamic Programming Introduction	https://www.geeksforgeeks.org/dynamic-programming/
N-K Ladders	https://www.geeksforgeeks.org/number-of-ways-to-reach-nth-floor-by-taking-at-most-k-leaps/
Minimum Jumps	https://leetcode.com/problems/jump-game-ii/
Longest Increasing Subsequence	https://leetcode.com/problems/longest-increasing-subsequence/
Maximum Height by Stacking Cuboids	https://leetcode.com/problems/maximum-height-by-stacking-cuboids/
Perfect Squares	https://leetcode.com/problems/perfect-squares/
Maximum Product Subarray	https://leetcode.com/problems/maximum-product-subarray/
Find Two Non-overlapping Sub-arrays Each With Target Sum	https://leetcode.com/problems/find-two-non-overlapping-sub-arrays-each-with-target-sum/
Path with Maximum Gold	https://leetcode.com/problems/path-with-maximum-gold/
Best Time to Buy and Sell Stock	https://leetcode.com/problems/best-time-to-buy-and-sell-stock/
Boredom	https://codeforces.com/problemset/problem/455/A
Sleeping Schedule	https://codeforces.com/problemset/problem/1324/E
Palindrome Partitioning	https://leetcode.com/problems/palindrome-partitioning/
Count All Possible Routes	https://leetcode.com/problems/count-all-possible-routes/
Modulo Sum	https://codeforces.com/problemset/problem/577/B
Cherry Pickup	https://leetcode.com/problems/cherry-pickup/
Barcode	https://www.hackerearth.com/practice/algorithms/dynamic-programming/counting-and-arrangements/practice-problems/algorithm/barcode-monk-1/
Maximum Number of Events That Can Be Attended	https://leetcode.com/problems/maximum-number-of-events-that-can-be-attended/
Number of Ways to Wear Different Hats to Each Other	https://leetcode.com/problems/number-of-ways-to-wear-different-hats-to-each-other/
Minimum XOR Sum of Two Arrays	https://leetcode.com/problems/minimum-xor-sum-of-two-arrays/
Numbers With Repeated Digits	https://leetcode.com/problems/numbers-with-repeated-digits/
Classy Numbers	https://codeforces.com/problemset/problem/1036/C
Tree with Maximum Cost	https://codeforces.com/problemset/problem/1092/F
Minimum Cost to Reach Destination in Time	https://leetcode.com/problems/minimum-cost-to-reach-destination-in-time/
Maximum White Subtree	https://codeforces.com/problemset/problem/1324/F
Frog I	https://atcoder.jp/contests/dp/tasks/dp_a
Frog II	https://atcoder.jp/contests/dp/tasks/dp_b
Maximum Vacation Days	https://www.lintcode.com/problem/874/
Knapsack 1	https://atcoder.jp/contests/dp/tasks/dp_d
Knapsack 2	https://atcoder.jp/contests/dp/tasks/dp_e
Target Sum	https://leetcode.com/problems/target-sum/
Longest Common Subsequence	https://atcoder.jp/contests/dp/tasks/dp_f
Longest Path	https://atcoder.jp/contests/dp/tasks/dp_g
Grid I	https://atcoder.jp/contests/dp/tasks/dp_h
Grid II	https://atcoder.jp/contests/dp/tasks/dp_y
Coins	https://atcoder.jp/contests/dp/tasks/dp_i
Sushi	https://atcoder.jp/contests/dp/tasks/dp_j
Stones	https://atcoder.jp/contests/dp/tasks/dp_k
Deque	https://atcoder.jp/contests/dp/tasks
Candies	https://atcoder.jp/contests/dp/tasks
Slimes	https://atcoder.jp/contests/dp/tasks
Matching	https://atcoder.jp/contests/dp/tasks
Independent Set	https://atcoder.jp/contests/dp/tasks/dp_p
Flowers	https://atcoder.jp/contests/dp/tasks/dp_q
Walk	https://cses.fi/contests/dp/tasks/dp_r
Digit Sum	https://atcoder.jp/contests/dp/tasks/dp_s
Permutation	https://atcoder.jp/contests/dp/tasks/dp_t

PATTERN MATCHING

Topic	Link
Naive Method for Pattern Matching	https://www.geeksforgeeks.org/naive-algorithm-for-pattern-searching/
Trie Introduction	https://www.geeksforgeeks.org/trie-insert-and-search/
Pattern Matching using Trie	https://www.ideserve.co.in/learn/pattern-matching-using-trie
Word Search	https://leetcode.com/problems/word-search/
String Hashing - Polynomial Hash Function	https://cp-algorithms.com/string/string-hashing.html
Rolling Hash Rabin Karp Algorithm	https://www.geeksforgeeks.org/rabin-karp-algorithm-for-pattern-searching/
Longest Common Subpath	https://leetcode.com/problems/longest-common-subpath/
Find and Replace Pattern	https://leetcode.com/problems/find-and-replace-pattern/

GEOMETRY

Topic	Link
Orientation of 3 ordered points	https://www.geeksforgeeks.org/orientation-3-ordered-points/
Graham's Scan Algorithm	https://www.geeksforgeeks.org/convex-hull-set-2-graham-scan/
Polygons	https://codeforces.com/problemset/problem/166/B

INTERACTIVE PROBLEMS

Topic	Link
Guess the Number	https://codeforces.com/problemset/gymProblem/101021/1
Lost Numbers	https://codeforces.com/problemset/1167/B
XOR Guessing	https://codeforces.com/problemset/problem/1207/E

RANDOMIZATION

Topic	Link
Set of Randomized Algorithms	https://www.geeksforgeeks.org/randomized-algorithms/

Policy-Based Data Structures

Topic	Link
Policy-Based Data Structures Introduction	https://www.geeksforgeeks.org/policy-based-data-structures-g/
Inversion Count using Policy-Based Data Structures	https://www.geeksforgeeks.org/inversion-count-using-policy-based-data-structure/