

Introductory Problems

- [Weird Algorithm](#)88831 / 93018
 - [Missing Number](#)75475 / 79704
 - [Repetitions](#)65890 / 69132
 - [Increasing Array](#)61360 / 64041
 - [Permutations](#)53965 / 55837
 - [Number Spiral](#)38169 / 41634
 - [Two Knights](#)28553 / 29571
 - [Two Sets](#)30821 / 33525
 - [Bit Strings](#)36055 / 38123
 - [Trailing Zeros](#)33747 / 36140
 - [Coin Piles](#)29641 / 32729
 - [Palindrome Reorder](#)26999 / 28813
 - [Gray Code](#)16410 / 18770
 - [Tower of Hanoi](#)15389 / 16061
 - [Creating Strings](#)23330 / 24045
 - [Apple Division](#)22562 / 25948
 - [Chessboard and Queens](#)13446 / 13724
 - [Digit Queries](#)8852 / 10691
 - [Grid Paths](#)5570 / 7106
-

Sorting and Searching

- [Distinct Numbers](#)41001 / 45221
- [Apartments](#)29855 / 34067
- [Ferris Wheel](#)28341 / 31086
- [Concert Tickets](#)22659 / 27088
- [Restaurant Customers](#)23262 / 25418
- [Movie Festival](#)21843 / 23388
- [Sum of Two Values](#)25822 / 29497
- [Maximum Subarray Sum](#)25502 / 26876
- [Stick Lengths](#)22471 / 23785
- [Missing Coin Sum](#)15420 / 16039
- [Collecting Numbers](#)15976 / 17324
- [Collecting Numbers II](#)6394 / 8364
- [Playlist](#)16998 / 19929
- [Towers](#)17438 / 18869
- [Traffic Lights](#)13682 / 15407
- [Josephus Problem I](#)8963 / 10203
- [Josephus Problem II](#)5230 / 6790
- [Nested Ranges Check](#)5083 / 6004
- [Nested Ranges Count](#)3631 / 4180
- [Room Allocation](#)9878 / 11517
- [Factory Machines](#)12312 / 13902

- [Tasks and Deadlines](#)11527 / 11804
 - [Reading Books](#)9164 / 9848
 - [Sum of Three Values](#)13314 / 15088
 - [Sum of Four Values](#)8470 / 9670
 - [Nearest Smaller Values](#)11343 / 11798
 - [Subarray Sums I](#)14438 / 15656
 - [Subarray Sums II](#)13305 / 15300
 - [Subarray Divisibility](#)11743 / 12957
 - [Subarray Distinct Values](#)6560 / 7070
 - [Array Division](#)10462 / 11118
 - [Sliding Window Median](#)7130 / 8171
 - [Sliding Window Cost](#)4921 / 5737
 - [Movie Festival II](#)6160 / 7481
 - [Maximum Subarray Sum II](#)5614 / 6738
-

Dynamic Programming

- [Dice Combinations](#)40568 / 43249
 - [Minimizing Coins](#)34860 / 37797
 - [Coin Combinations I](#)32025 / 35039
 - [Coin Combinations II](#)26994 / 31029
 - [Removing Digits](#)29834 / 30622
 - [Grid Paths](#)28346 / 29318
 - [Book Shop](#)24958 / 27995
 - [Array Description](#)18024 / 20365
 - [Counting Towers](#)9968 / 10584
 - [Edit Distance](#)18902 / 20092
 - [Rectangle Cutting](#)15772 / 17298
 - [Money Sums](#)18802 / 19649
 - [Removal Game](#)13421 / 15024
 - [Two Sets II](#)14877 / 16243
 - [Increasing Subsequence](#)15278 / 17362
 - [Projects](#)10237 / 11663
 - [Elevator Rides](#)6056 / 7819
 - [Counting Tilings](#)3473 / 3823
 - [Counting Numbers](#)4676 / 5320
-

Graph Algorithms

- [Counting Rooms](#)27822 / 29688
- [Labyrinth](#)18062 / 22562
- [Building Roads](#)23776 / 24769
- [Message Route](#)20180 / 21177
- [Building Teams](#)19565 / 20569
- [Round Trip](#)15313 / 16905

- [Monsters](#)9397 / 11652
 - [Shortest Routes I](#)16487 / 18451
 - [Shortest Routes II](#)13743 / 15057
 - [High Score](#)6775 / 11393
 - [Flight Discount](#)9501 / 11701
 - [Cycle Finding](#)7190 / 9075
 - [Flight Routes](#)6653 / 7504
 - [Round Trip II](#)8044 / 9248
 - [Course Schedule](#)11061 / 11546
 - [Longest Flight Route](#)6881 / 9245
 - [Game Routes](#)8193 / 8882
 - [Investigation](#)5913 / 6424
 - [Planets Queries I](#)4957 / 6111
 - [Planets Queries II](#)2008 / 2518
 - [Planets Cycles](#)3334 / 3750
 - [Road Reparation](#)7824 / 8213
 - [Road Construction](#)8329 / 8649
 - [Flight Routes Check](#)7108 / 7841
 - [Planets and Kingdoms](#)5798 / 6055
 - [Giant Pizza](#)2278 / 2579
 - [Coin Collector](#)3580 / 4089
 - [Mail Delivery](#)3091 / 3456
 - [De Bruijn Sequence](#)1668 / 1757
 - [Teleporters Path](#)2462 / 2778
 - [Hamiltonian Flights](#)3370 / 3870
 - [Knight's Tour](#)1444 / 1711
 - [Download Speed](#)2305 / 3403
 - [Police Chase](#)1941 / 2243
 - [School Dance](#)2119 / 2266
 - [Distinct Routes](#)1332 / 1862
-

Range Queries

- [Static Range Sum Queries](#)18619 / 19514
- [Static Range Minimum Queries](#)13935 / 14923
- [Dynamic Range Sum Queries](#)14353 / 15037
- [Dynamic Range Minimum Queries](#)12959 / 13302
- [Range Xor Queries](#)13156 / 13360
- [Range Update Queries](#)10512 / 11344
- [Forest Queries](#)10295 / 10725
- [Hotel Queries](#)7472 / 7893
- [List Removals](#)6208 / 6564
- [Salary Queries](#)4611 / 5564
- [Prefix Sum Queries](#)3615 / 3976
- [Pizzeria Queries](#)2971 / 3084
- [Subarray Sum Queries](#)3810 / 4306

- [Distinct Values Queries](#)3609 / 4433
 - [Increasing Array Queries](#)1277 / 1473
 - [Forest Queries II](#)2530 / 2742
 - [Range Updates and Sums](#)2962 / 3615
 - [Polynomial Queries](#)2255 / 2656
 - [Range Queries and Copies](#)1574 / 1719
-

Tree Algorithms

-
- [Subordinates](#)15657 / 16973
 - [Tree Matching](#)8762 / 10378
 - [Tree Diameter](#)12983 / 13942
 - [Tree Distances I](#)9642 / 10484
 - [Tree Distances II](#)7860 / 8219
 - [Company Queries I](#)8695 / 9231
 - [Company Queries II](#)8148 / 8623
 - [Distance Queries](#)7668 / 8222
 - [Counting Paths](#)4535 / 4867
 - [Subtree Queries](#)5599 / 6002
 - [Path Queries](#)4405 / 4665
 - [Path Queries II](#)1395 / 2480
 - [Distinct Colors](#)4189 / 4767
 - [Finding a Centroid](#)3367 / 3530
 - [Fixed-Length Paths I](#)1296 / 1952
 - [Fixed-Length Paths II](#)518 / 1351
-

Mathematics

-
- [Josephus Queries](#)2145 / 2717
 - [Exponentiation](#)12910 / 13969
 - [Exponentiation II](#)9379 / 11591
 - [Counting Divisors](#)11086 / 12696
 - [Common Divisors](#)7482 / 9058
 - [Sum of Divisors](#)4349 / 6675
 - [Divisor Analysis](#)2767 / 3704
 - [Prime Multiples](#)2949 / 3491
 - [Counting Coprime Pairs](#)1889 / 2237
 - [Binomial Coefficients](#)5257 / 5982
 - [Creating Strings II](#)4392 / 4707
 - [Distributing Apples](#)4287 / 4648
 - [Christmas Party](#)3369 / 3667
 - [Bracket Sequences I](#)2262 / 2522
 - [Bracket Sequences II](#)1146 / 1324
 - [Counting Necklaces](#)1138 / 1229
 - [Counting Grids](#)905 / 969

- [Fibonacci Numbers](#)3893 / 4990
 - [Throwing Dice](#)2178 / 2365
 - [Graph Paths I](#)1968 / 2125
 - [Graph Paths II](#)1658 / 1726
 - [Dice Probability](#)1889 / 2000
 - [Moving Robots](#)950 / 1014
 - [Candy Lottery](#)1451 / 1492
 - [Inversion Probability](#)364 / 1313
 - [Stick Game](#)1940 / 1994
 - [Nim Game I](#)2419 / 2510
 - [Nim Game II](#)1974 / 2058
 - [Stair Game](#)1363 / 1496
 - [Grundy's Game](#)871 / 1102
 - [Another Game](#)940 / 1016
-

String Algorithms

-
- [Word Combinations](#)2766 / 4287
 - [String Matching](#)5418 / 7952
 - [Finding Borders](#)4060 / 4564
 - [Finding Periods](#)2749 / 3141
 - [Minimal Rotation](#)1432 / 2366
 - [Longest Palindrome](#)2187 / 2962
 - [Required Substring](#)843 / 1381
 - [Palindrome Queries](#)1023 / 1201
 - [Finding Patterns](#)872 / 1289
 - [Counting Patterns](#)784 / 1052
 - [Pattern Positions](#)691 / 888
 - [Distinct Substrings](#)831 / 1001
 - [Repeating Substring](#)814 / 909
 - [String Functions](#)792 / 831
 - [Substring Order I](#)611 / 654
 - [Substring Order II](#)398 / 505
 - [Substring Distribution](#)542 / 590
-

Geometry

-
- [Point Location Test](#)3729 / 4146
 - [Line Segment Intersection](#)2248 / 2852
 - [Polygon Area](#)2682 / 2819
 - [Point in Polygon](#)1430 / 1847
 - [Polygon Lattice Points](#)1237 / 1281
 - [Minimum Euclidean Distance](#)1132 / 1578
 - [Convex Hull](#)1815 / 2212
-

Advanced Techniques

- [Meet in the Middle](#)2958 / 4817
 - [Hamming Distance](#)1730 / 1877
 - [Beautiful Subgrids](#)1197 / 1355
 - [Reachable Nodes](#)1209 / 1316
 - [Reachability Queries](#)846 / 1004
 - [Cut and Paste](#)783 / 880
 - [Substring Reversals](#)683 / 750
 - [Reversals and Sums](#)682 / 742
 - [Necessary Roads](#)1029 / 1058
 - [Necessary Cities](#)935 / 986
 - [Eulerian Subgraphs](#)444 / 472
 - [Monster Game I](#)638 / 704
 - [Monster Game II](#)575 / 623
 - [Subarray Squares](#)611 / 721
 - [Houses and Schools](#)419 / 477
 - [Knuth Division](#)479 / 544
 - [Apples and Bananas](#)449 / 500
 - [One Bit Positions](#)425 / 472
 - [Signal Processing](#)403 / 444
 - [New Roads Queries](#)1043 / 1278
 - [Dynamic Connectivity](#)456 / 514
 - [Parcel Delivery](#)379 / 436
 - [Task Assignment](#)352 / 382
 - [Distinct Routes II](#)300 / 350
-

Additional Problems

- [Shortest Subsequence](#)1762 / 2274
- [Counting Bits](#)2060 / 2664
- [Swap Game](#)1126 / 1448
- [Prüfer Code](#)796 / 888
- [Acyclic Graph Edges](#)1231 / 1316
- [Strongly Connected Edges](#)723 / 791
- [Even Outdegree Edges](#)659 / 774
- [Multiplication Table](#)2376 / 2699
- [Advertisement](#)2229 / 2381
- [Special Substrings](#)506 / 550
- [Permutation Inversions](#)550 / 609
- [Maximum Xor Subarray](#)1315 / 1439
- [Movie Festival Queries](#)589 / 661
- [Chess Tournament](#)665 / 760
- [Tree Traversals](#)638 / 718
- [Network Renovation](#)546 / 738

- [Graph Girth](#)1673 / 1954
- [Intersection Points](#)1008 / 1082
- [Inverse Inversions](#)571 / 595
- [Monotone Subsequences](#)365 / 404
- [String Reorder](#)466 / 511
- [Stack Weights](#)332 / 382
- [Pyramid Array](#)457 / 547
- [Increasing Subsequence II](#)1296 / 1403
- [String Removals](#)586 / 636
- [Bit Inversions](#)1375 / 1516
- [Xor Pyramid](#)687 / 871
- [Writing Numbers](#)467 / 506
- [String Transform](#)293 / 365
- [Letter Pair Move Game](#)105 / 151
- [Maximum Building I](#)1177 / 1224
- [Sorting Methods](#)484 / 520
- [Cyclic Array](#)582 / 674
- [List of Sums](#)265 / 354
- [Increasing Array II](#)417 / 473
- [Food Division](#)326 / 385
- [Bit Problem](#)836 / 905
- [Swap Round Sorting](#)239 / 301
- [Binary Subsequences](#)125 / 198
- [Tree Isomorphism I](#)606 / 704
- [Counting Sequences](#)342 / 365
- [Critical Cities](#)224 / 352
- [School Excursion](#)754 / 800
- [Coin Grid](#)415 / 490
- [Robot Path](#)175 / 307
- [Programmers and Artists](#)279 / 354
- [Course Schedule II](#)901 / 1304
- [Removing Digits II](#)106 / 222
- [Coin Arrangement](#)182 / 243
- [Counting Bishops](#)189 / 212
- [Grid Puzzle I](#)289 / 317
- [Grid Puzzle II](#)201 / 226
- [Empty String](#)832 / 990
- [Grid Paths](#)464 / 572
- [Bit Substrings](#)196 / 247
- [Reversal Sorting](#)185 / 225
- [Counting Reorders](#)118 / 176
- [Book Shop II](#)587 / 664
- [Network Breakdown](#)559 / 588
- [Visiting Cities](#)392 / 508
- [Missing Coin Sum Queries](#)221 / 289
- [Number Grid](#)540 / 649

- [Maximum Building II](#)267 / 326
 - [Filling Trominos](#)105 / 180
 - [Stick Divisions](#)2023 / 2395
 - [Coding Company](#)785 / 1008
 - [Flight Route Requests](#)251 / 306
 - [Two Stacks Sorting](#)77 / 288
 - [Tree Isomorphism II](#)504 / 572
 - [Forbidden Cities](#)380 / 490
 - [Area of Rectangles](#)591 / 669
 - [Grid Completion](#)115 / 154
 - [Creating Offices](#)231 / 302
 - [Permutations II](#)518 / 590
 - [Functional Graph Distribution](#)128 / 159
 - [New Flight Routes](#)202 / 445
-

[Grid Path Construction](#)56 / 200