Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
Balkan 15-TILING	todo	9		[222]			
Balkan 16-Hacker	todo	9		[222]			
JOIOC 14-migration	todo	9		[222]			
Balkan 17-tale	geometry, impl	9		[37]			
IOIPractice 16-tree-square	graph	9		[46]			
JOIOC 14-space_pirate	graph, dfs, long impl	9		[50]			
ROUSelection 18-generating_set	math, permutations, swaps, queries, impl, [restrict time]	9		[68]			
CEOI 18-Fib	segment tree, fib, impl	8.5	Editorial	[13]			
ROUSelection 18-sortall	bit, impl	8.5		[15]			
CEOI 19-Scissors	todo	8.5	Editorial	[222]			
IOI 19-walk	todo	8.5	Official sols	[222]			
ROUSelection 18-tournament	todo, hmm, preprocessing, impl	8.5		[222]			
APIO 18-newhome	datastructures, segment tree, d&c	8.25	Sol	[4]	p5	4	7
IOI 18-meetings	segment tree, [solve CODECHEF SAFPAR first]	8.1	Sol	[13]	p4	2	4
USACO 19feb-mowing-plat	dp, dp_trick, montonic queue	8	Sol	[130]	p3		2
CEOI 19-Skyscrapers	graph, scc, biconnected components, dsu	8	Editorial	[64]	p3	2	3
CEOI 19-Diameter	segment tree, hld, centroid decomposition or others	8	Editorial	[13]	p2	2	3
IOI 12-odometer	~~ad-hoc, long impl, optimizations, [tedious, boring]~~	~~8~~	Editorial	[1]		~~2~~	~~2~~
IOI 10-maze	~~ad-hoc, heuristics, constructive, [output-only], [bad editorial], [not good problem]~~	~~8~~	Editorial	[1]		1	2
CEOI 15-nuclearia	ad-hoc, long impl	8	Editorial	[1]			
Balkan 17-sheets	ad-hoc	8		[1]			
Balkan 17-strings	bbst, treap	8		[106]			
POI 15-Sorcerer	~~impl, [official is too many cases to handle], ignore~~	~~8~~	Editorial	[109]		~~1~~	~~1~~
CEOI 13-splot	~~impl, [very specific - don't assign]~~	~~8~~	Editorial	[109]			
CEOI 13-watering	impl, [very specific - don't assign], [output-only], [code then change output!]	8	Editorial	[109]			
EJOI 17-camel	impl, ???	8		[109]			
MCOCAMP 16-flipbrackets	graph, hld, datastructures, impl	8	Sol (no edit	[122]			
POI 09-Algorithm_Speedup	dp, impl, [not nice]	8	Editorial	[16]		1	2
APIO 11-guessword [1]	todo, [https://www.acmicpc.net/category/detail/221 - http://140.136.150.68/judge/prob	8		[222]			
CCO 18-FunPalace	todo	8		[222]			
JOIOC 17-golf	todo	8		[222]			
JOISC 15-aaqqz	todo	8		[222]			
JOISC 15-keys	todo	8		[222]			
JOISC 15-memory	todo	8		[222]			
NOI 19-shuffle	todo, ad-hoc, Graph Theory, Blackbox, Bit Manipulation	8		[222]			
ROJS 17-combinatorix	dp, dp_counting, impl	8		[26]			

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
NOIMOCK 15-travel	graph	8		[46]		1	2
IOIPractice 16-cograph_clique	graph, greedy, recursion, clique, max independent set	8		[46]			
JOI 19-UniqueCities	graph, tree diamter, others, [JOI19_ho_t5]	8		[46]			
Baltic 17-Friends	backtrack, [https://open.kattis.com/problems/friends2]	8	hints	[5]			
EJOI 17-experience	graph, dfs	8		[50]			
JOISC 18-asceticism	math, eulerian numbers, combinatorics, integrals, inclusion-exclusion, [William: Would	8	Sol	[68]			4
COCI 17-gauss	math, seive, divisors, misc, long impl	8		[68]			
MCOCAMP 16-flippermutation	math, factorization, lcm, cycles, permutations, impl	8	Sol (no edit	[85]			
CEOI 16-match	dp, dp_ranges or greedy, d&c, [first Subtask : Ranges dp second Subtask : Ranges d	7.75	Sol	[31]	p5	2	10
APIO 18-circleselection	geometry, sweep line, circles, datastructures, greedy, [editorial https://codeforces.com	7.75	Sol	[44]	p5	3	7
CEOI 14-wall	graph, dijkstra, [editorial]	7.75	Sol	[52]	p5	1	6
CEOI 09-Boxes	sqrt decomposition, ad-hoc, interactive	7.75	Sol	[126]	p4		1
CEOI 12-circuit [2]	geometry, polygon, visibility, [interesting o(n) sol]	7.75	Sol	[40]	p4		1
COI 14-grad	graph, lca, **hard impl**	7.75	Editorial	[65]	p4		3
IOI 09-archery	segment tree, binary search, observations, tricky or editorial sol	7.75	Editorial	[13]	p3	1	2
IOI 17-simurgh	graph, scc, queries, back edges, binary search, interactive	7.75	Sol	[61]	p3	4	8
JOISC 17-park	binary search, bfs, interactive [See JOISC-17-abduction2.txt]	7.75	Sol	[9]	p3		3
APIO 09-Convention	datastructures, binary lifting, greedy, observations, [https://www.acmicpc.net/category	7.75	Sol	[4]	p2		4
APIO 12-Kunai	ad-hoc, [https://tioj.ck.tp.edu.tw/problems/1519]	7.75	Sol	[1]		2	4
Balkan 15-RADIO	ad-hoc, impl	7.75	Sol (no edit	[1]			
APIO 14-Palindrome	string processing, suffix array, impl, [=SPOJ APIO14_A, https://tioj.ck.tp.edu.tw/proble	7.75	Sol	[104]			3
COI 17-trapezi	dp, bitmasks, impl	7.75	Sol by ko_c	[16]			
CEOI 07-Sail	todo	7.75		[222]			
APIO 13-Toll	graph, mst	7.75	Sol	[60]		1	3
USACO 18jan-atlarge-plat	sqrt decomposition, dfs, observations, tricky	7.5	Sol	[126]	p5		2
IOI 14-holiday	segment tree, d&c or bit, persistent or dp_d&c_opt	7.5	Sol	[13]	p5	4	11
APIO 16-fireworks	dp, slope_trick, datastructures	7.5	Sol	[16]	p5		9
IZhO 17-road	dp, dp_trees	7.5	Sol	[136]	p4		2
JOIOC 13-synchronization	bit, dfs or centroid-decomposition, segment tree or link-cut	7.5	Sol	[15]	p4	1	8
Baltic 13-vim	dp	7.5	Sol	[16]	p4		2
Baltic 07-Sorting	dp, backtrack, math	7.5	Editorial	[16]	p4		2
JOISC 17-city	graph, tree, [communication style]	7.5	Sol	[46]	p4		2
APIO 18-duathlon	graph, scc, biconnected components, impl or block cut tree, centroid	7.5	Sol	[64]	p4	3	10
IOI 14-rail	ad-hoc, cases analysis, observations	7.5	Sol	[1]	p3	2	8
COCI 14-Divljak	string processing, aho_corasick, bit or aho, hld or suffix array, bit	7.5	Editorial	[103]	p3		1
USACO 18mar-trainplat	sqrt decomposition	7.5		[126]	p3		1

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JOISC 17-railway_trip	segment tree or sqrt decomposition or rmq, binary lifting	7.5	Sol	[13]	p3		3
JOISC 19-Antennas	segment tree, [offline queries]	7.5	Sol	[13]	p3		3
JOISC 19-Dishes	dp, datastructures	7.5		[16]	p3		1
CEOI 19-AmusementPark	dp, dp_bitmasks, optimizations	7.5	Editorial	[24]	p3		1
USACO 19dec-plat-treedepth	dp, dp_counting, observations, optimizations	7.5		[26]	p3		1
CCOMock 17-Connection	datastructures, range tree, [small-to-large], [easy idea]	7.5	Sol	[4]	p3		2
JOISC 19-timeleap	datastructures	7.5		[4]	p3		1
JOISC 19-Meetings	graph, trees, interactive	7.5		[46]	p3		1
JOISC 19-Transportations	graph, dijkstra, [communication]	7.5		[52]	p3		1
USACO 17mar-grass	graph, mst, datastructures	7.5	Sol	[60]	p3		2
JOIOC 19-Virus	graph, scc, dfs, [small-to-large]	7.5	Sol (no edit	[61]	p3	1	2
IZhO 17-bomb	math	7.5	Sol	[68]	p3	1	2
CEOI 16-trick	math, constructive	7.5	Sol	[68]	p3	1	2
POI 09-Words	math, fib	7.5	Sol	[71]	p3	1	5
JOIOC 19-jumps	segment tree	7.5	Sol (no edit	[13]	p2	1	2
dmoj ccoprep4p3	graph, mst, d&c, [specific algo to learn]	7.5	Sol	[60]	p2		1
IOI 11-parrots	ad-hoc, data compression, bigInteger	7.5	Editorial	[1]		2	4
APIO 12-Guard	ad-hoc, [https://tioj.ck.tp.edu.tw/problems/1430]	7.5		[1]		1	2
IOI 19-line	ad-hoc, impl	7.5	Sol	[1]		1	1
JOISC 19-Minerals	ad-hoc, d&c, [const factor optimizations]	7.5		[1]			1
POI 15-Desert	impl??	7.5	Editorial	[109]			
JOIOC 18-Collapse	sqrt decomposition	7.5	Editorial	[126]		2	2
Balkan 16-Lefkaritika	segment tree, math, impl	7.5	Sol (no edit	[13]			
IOI 08-fish	segment tree	7.5	Editorial	[13]			
IOIPractice 14-grand-noi-icpc-battle-ioi14	segment tree, lazy propagation, queries	7.5		[13]			
POI 15-Car	dp	7.5	Editorial	[16]			
COCI 17-dojave	todo, hmm, [short code]	7.5		[222]		1	2
IOI 19-split	todo	7.5	Official sols	[222]		1	1
POI 16-Club	todo, hmm, [https://www.youtube.com/watch?v=PRmAUzgbOBI]	7.5	Editorial	[222]			
CCO 18-FlopSorting	todo	7.5		[222]			
IOIPractice 17-sudoku_ioi	todo	7.5		[222]			
JOISC 14-Constella	todo, [**JAPANESE**]	7.5		[222]			
JOISC 15-ioioi_cards	todo	7.5		[222]			
JOISC 16-Dungeon2	todo, [**JAPANESE**]	7.5		[222]			
JOISC 16-Snowy	todo, [**JAPANESE**]	7.5		[222]			
EJOI 17-six	dp, dp_bitmasks, factorization, mod inv, misc, impl	7.5		[24]			

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
Baltic 16-spiral	geometry, impl	7.5	Sol(Editoria	[37]			
IOIPractice 14-david-copperfailed-ioi14	geometry, primes, factrization	7.5		[37]			
Baltic 14-demarcation	geometry, polygon, impl	7.5	Editorial	[40]			
IOI 16-shortcut	graph, datastructures, maths, [Eldar got 93]	7.5	Editorial	[46]		3	3
Balkan 15-Circus	graph, sp, [Tim: Works only for 51 points -> I don't know the solution but only 1 contes	7.5	Sol (no edit	[46]			1
IOI 06-forbidden	graph, subgraph, isomorphism, [Forbidden subgraph problem], [submission problem?	7.5	Editorial	[46]			
CEOI 08-Information	graph, mst, directed, arborescence	7.5	Editorial	[60]			
Balkan 16-PowerTowers	math, number theory, power tower	7.5	Editorial	[68]			1
IZhO 19-xorsum	math, countings, mods, overflows, ????	7.5		[68]			
Baltic 10-Mines	math, mod, impl, [boring?]	7.5	Editorial	[74]		1	1
JOISC 18-worstreporter3	binary search	7.5	sol (See re	[9]			5
APIO 17-koala	binary search, game, long impl, interactive	7.5	Sol	[9]		1	2
IOI 10-hottercolder	binary search, case analysis	7.5	Editorial	[9]		2	2
IZhO 18-segments	sqrt decomposition, long impl, [strict time]	7.4	Sol	[126]	p2		3
Baltic 10-Bears	geometry, rectangles, binary search	7.3	Sol	[37]	p4		2
IOI 16-aliens	dp, dp_alien	7.25	Sol	[127]	p5	2	11
JOIOC 16-skyscraper	dp, dp_component, dp_open_close, [solve CEOI 16-Kangaroo first], [|x-y| = max(x,y)-	7.25	Sol	[131]	p5		7
Balkan 11-timeismoney	graph, mst, geometry, lines, ccw	7.25	Sol	[60]	p5		3
POI 12-Prefixuffix	string processing, kmp or hashing	7.25	Sol	[102]	p4		1
JOISC 18-construction	graph, hld, bit or link-cut tree or binary lifting, segment tree, [common trick for some]	7.25	Sol	[122]	p4		7
JOISC 17-coach	dp, dp_convex_hull	7.25	Sol	[124]	p4	2	4
JOISC 18-bitaro	sqrt decomposition, dp	7.25	Sol	[126]	p4		12
POI 13-Price	sqrt decomposition, dijkstra	7.25	Sol	[126]	p4	1	4
IOI 08-pyramid_base	segment tree or datastructures, sweep range	7.25	Sol	[13]	p4		4
USACO 18dec-itoutplat	bit or dp, datastructures, LIS	7.25	Sol	[15]	p4		6
IOI 17-train	game theory, topological sort, parity game, [solve Baltic 14-coprobber first]	7.25	Sol	[33]	p4	2	8
IOI 06-points	geometry, triangles, d&c, [=CF1045-D12-E with smaller constraints]	7.25	Sol	[37]	p4		2
infoarena nuke [3]	geometry, circles, datastructures	7.25	Sol	[38]	p4		1
IOI 17-books	graph, cycles, graph compression, constructive	7.25	Editorial	[46]	p4	2	7
IOI 03-reverse	ad-hoc, optimizations	7.25	Editorial	[1]	p3		3
COCI 10-upit	bbst, treap, impl	7.25	Sol	[106]	p3		1
IOI 18-seats	segment tree, optimizations, **hard impl**	7.25	Sol	[13]	p3	3	5
Baltic 09-Monument [4]	dp, stack, next greater element, preprocessing	7.25	Sol	[16]	p3	1	5
COI 09-Loza	dp, dsu, constructive, [small-to-large]	7.25	Sol	[16]	p3	1	4
JOI 18-snakeescaping	dp, dp_bitmasks or d&c, precalc	7.25	Sol	[24]	p3	1	4
NOI 18-safety	greedy, slope_trick	7.25	Editorial	[32]	p3	1	4

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Baltic 15-edi	datastructures, binary lifting, observations, [may solve similar easier first: IOI 12-scriv	7.25	Sol	[4]	p3		1
IOI 16-railroad	graph, mst	7.25	Editorial	[60]	p3	2	6
USACO 18feb-gymnasts-plat	math, combinatorics, number theory	7.25		[82]	p3		2
POI 12-Leveling	math, extended gcd	7.25	Editorial	[94]	p3	1	1
POI 16-Hydro	graph, scc, biconnected components, cactus, dp_games, sparse table, [ok idea - trick	7.25	Sol	[64]	p2	1	4
POI 15-Direction	impl, bits	7.25	Editorial	[109]			
COI 18-svjetlost	segment tree, lazy, geomery, impl, [geometry part is hard]	7.25		[13]			1
COCI 08-Krtica	dp, trees, impl, [cases]	7.25	Sol	[16]			1
Baltic 19-necklace4	dp, strings or randomization, [not clear editorial - assign strong guy]	7.25	Editorial	[16]			1
Baltic 12-Tiny	todo	7.25		[222]			
IOIPractice 17-mountains	todo	7.25		[222]			
COCI 15-drzava	geometry, graph, impl	7.25	Editorial	[37]			
Baltic 11-Polygon	geometry, polygon	7.25	Editorial	[40]			
IOIPractice 16-empty-triangles	geometry, polygon, convex hull-like	7.25		[42]			
COI 18-zagonetka	graph, impl	7.25		[46]			
COCI 09-Poslozi	graph, bfs, bidirectional or search, A*, impl	7.25	Editorial	[48]		1	1
CEOI 08-Order	graph, max-flow, [editorial solution **seems to be incorrect** (or I'm misunderstanding e	7.25	Editorial	[56]			1
POI 05-Mirror	math, ad-hoc, impl, [heavy math]	7.25	Editorial	[68]			1
COI 16-palinilap	string processing, hashing, binary search, palindromes	7.2	Sol	[137]	p3		2
Balkan 17-Cats	dp, greedy, impl, [cases, non standard]	7.1	Sol	[16]	p4 v2	1	12
COI 14-gta	ad-hoc, string, transformations	7.1	Sol	[1]	p4	2	6
POI 08-Robinson	dp, dp_convex_hull, bfs, impl, [!dp]	7.1	Sol	[124]	p4		3
IOI 13-wombats	segment tree, dp_knuth or dp_d&c_opt, long impl	7.1	Sol	[13]	p4	3	8
APIO 17-rainbow	segment tree, persistent, euler's formula or datastructures	7.1	Sol	[13]	p4	1	6
IOI 12-city	dp, dp_trees, [Interesting reduction to tree problem]	7.1	Sol	[136]	p4	1	11
IOI 07-training	dp, dp_trees, dp_bitmasks. lca	7.1	Sol	[136]	p4	1	5
APIO 07-Backup	greedy, matching, datastructures, [=JOISC 18-candies]	7.1	Sol	[32]	p4		8
Baltic 09-Candy	greedy, sorting, LIS, coordinate transformation, [if hard solve first CF76-D12-F CODE	7.1	Sol	[32]	p4		8
COCI 15-Domino	graph, meet in middle, dp, [remove constant factors from order] or ad-hoc	7.1	Sol	[46]	p4		7
POI 16-Journey	graph, scc, biconnected components, math, impl, [onion graph]	7.1	Sol	[64]	p4		4
JOIOC 16-joiris	math, mod, ad-hoc	7.1	Sol	[74]	p4	2	6
IOI 17-wiring	dp, ad-hoc, observations, partitioning	7.1	Sol	[16]	p3	2	12
APIO 16-boat	dp, dp_state_reduce, combinatorics, [dublicate counting]	7.1	Sol	[18]	p3	1	6
Innopolis 19-Q1-D	todo	7.1		[222]	p3		2
Innopolis 20-Q1-D	todo	7.1		[222]	p3		
IOIPractice 19-Job	greedy, trees, exchange argument, small-to-large	7.1	Sol	[32]	p3		4

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JOISC 17-dragon2	geometry, sweep line, angular sweep, bit, sqrt decomposition, impl	7.1	Sol	[44]	p3		2
USACO 19jan-exercise	graph, trees, datastructures, [cases]	7.1		[46]	p3	1	7
POI 14-Supercomputer	graph, upper hull of functions, [similar to convex hull trick]	7.1	Sol	[46]	p3		4
IOI 18-werewolf	graph, dsu, dsu on trees, bit, [new trick to find common elements b/w two subtrees, Ir	7.1	Sol	[53]	p3	2	10
POI 08-Escape	dp, dp_subrectangle, [count paths, cases, sstrict ml]	7.1	Sol	[20]	p2		3
APIO 14-Beads	dp, dp_sibling, [**hard impl** and tricky cases]	7.1	Sol	[115]		2	5
ROJS 17-chromatic_number	dp, dijkstra, palindromes	7.1		[16]			1
POI 14-Around	greedy	7.1		[32]			2
IOI 18-highway	graph, dijkstra, binary search, impl	7.1	Editorial	[52]		2	3
APIO 11-Color [5]	graph, dfs, eqs or 2-sat, xor	7	Sol	[50]	p5	1	9
Balkan 12-ShortestPaths [6]	graph, dijkstra, shortest path tree, [tight limit on: https://www.spoj.com/problems/SPAT	7	Sol	[52]	p5		9
IOI 16-messy	ad-hoc, interactive, d&c, bits, [hard to impl]	7	Sol	[1]	p4		14
JOISC 18-airline	ad-hoc, interactive, DAG, [communication style]	7	Sol	[1]	p4		5
MCO 17-MagicalTeleporter	dp, dp_component, [solve CEOI 16-kangaroo first]	7	Editorial	[131]	p4	3	7
COCI 12-mars	dp, dp_ranges, trees	7	Find O(N^2	[31]	p4	1	7
JOIOC 17-bulldozer	geometry, segment tree, [optimization]	7	Sol	[37]	p4		5
COI 15-cvenk	graph, trees, constructive, impl, [sierpinski's triangle]	7	Sol	[46]	p4	1	7
POI 05-Parties	graph, constructive, recursion, observation, induction, [in Looking for a Challenge boo	7	Sol	[46]	p4	1	5
Baltic 14-sequence	backtrack, math, bitmasks, constructive, d&c	7	Sol	[5]	p4	2	7
POI 10-Bridges	graph, max-flow, euler cycle	7	Sol	[56]	p4	1	3
IOI 10-saveit [7]	graph, mst, data compression	7	Sol	[60]	p4	1	10
IOI 15-towns	ad-hoc, interactive	7	Sol	[1]	p3	1	2
JOIOC 16-selling_rna	string processing, trie, sweep or 2D trie or trie, bit	7	Sol	[101]	p3		4
infoarena disconnect	graph, hld, impl, [is similar to JOIOC 13-synchronization?]	7	Sol	[122]	p3		2
APIO 19-bridges	sqrt decomposition, dsu, [constant factorization]	7	Sol	[126]	p3		5
POI 04-Cave	dp, dp_trees	7	Sol	[136]	p3		4
COCI 16-zoltan	bit, dp, LIS, math, mod, overflow, impl	7	Sol	[15]	p3	1	6
CEOI 09-Sorting	dp	7	Sol	[16]	p3	2	5
LMIO 19-bulves	dp, slope_trick	7	Sol	[16]	p3		1
infoarena sms	dp, dp_probability, dp_expectation, linearity of expectation	7	Sol	[30]	p3		1
APIO 11-Path	graph, sp, grid compress, sweep line, impl	7	Sol	[46]	p3	1	5
NOI 18-citymapping	graph, bfs, tree diameter, interactive or randomization	7	Sol	[49]	p3	2	6
JOI 17-soccer	graph, dijkstra, impl	7	Editorial	[52]	p3		2
Balkan 18-minmaxtree	graph, max-flow, bipartite match	7	Sol	[58]	p3	1	5
POI 16-Arkanoid	math, geometry, simulation, observations to speed	7	Sol	[68]	p3		1
infoarena countfefete [8]	math, inclusion-exclusion, bitmasks, dsu	7	Sol	[86]	p3		3

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COCI 09-Gremlini	math, matrix, matrix pow, dp, graph, binary search, math	7	Sol	[89]	p3		3
CEOI 16-icc [9]	binary search, dsu, huffman tree, dsu	7	Sol	[9]	p3	2	11
IOI 13-game	segment tree, dynamic, 2D segment tree, impl or 1D treap, [easy idea - **hard impl**]	7	Editorial	[13]	p2	3	9
JOISC 18-wildboar	segment tree, dijkstra, d&c	7	Sol	[13]	p2	2	4
COCI 19-suncanje	bit, merge sort tree, tough impl	7	Sol	[15]	p2		2
DMOPC 18-StandingOvation	todo	7		[222]	p2		1
APIO 13-Robots	dp, dp_table, bfs, long impl, [tight time]	7	Sol	[23]	p2	2	5
COCI 07-Kocke	simulation, bfs, impl, [smart impl], [easy idea]	7	Sol	[3]	p2		1
Balkan 11-2circles	geometry, binary search, long impl, half-plane intersection	7	Sol	[37]	p2		1
COI 15-ogledala	datastructures, binary search, impl	7	Editorial	[4]	p2		2
JOISC 18-fences	geometry, polygon, floyd, cases, [simpler version Baltic 07-Fence (less geom)]	7	Sol	[40]	p2		1
Baltic 11-Mirroring	graph, cycles, bfs, long impl, [cases]	7	Sol	[46]	p2	1	2
COI 06-Policija	graph, scc, articulation point, lca, bridges, impl, [easy idea]	7	Sol	[63]	p2		4
JOISC 17-arranging_tickets	binary search	7	Sol	[9]	p2	1	2
Balkan 11-cmp	ad-hoc	7	Editorial	[1]			5
POI 10-Hamsters	ad-hoc?	7	Editorial	[1]		2	3
CEOI 14-questiongrader	ad-hoc, encoding, [different grader, where statement?], [Sperner's theorem]	7		[1]			3
IZhO 18-NiceGift	ad-hoc, logic	7		[1]		1	3
POI 06-Crystals	ad-hoc	7	Editorial	[1]		1	2
IOI 05-garden	ad-hoc, sliding window, dp	7	Editorial	[1]		1	1
ROUSelection 18-anagram_sort	ad-hoc, permutations, interactive, [HKOI 11-stones]	7		[1]			1
IOI 06-blackbox	~~ad-hoc, [avoid, weird, stef don't understand problem nature]~~	~~7~~	Editorial	[1]			
COCI 17-retro	ad-hoc, string parsing	7		[1]			
COCI 18-kotrljanje	ad-hoc, math, [very short code? maybe trivial]	7		[1]			
IOIPractice 16-telegraph	ad-hoc, quick sort, [judge not working]	7		[1]			
IZhO 12-xor	string processing, trie, greedy, tree	7		[101]		1	3
POI 15-Necklace	impl, trees	7	Editorial	[109]			
Baltic 15-bow	dp, dp_build_output, impl, cases, optimization, [boring]	7	Sol	[111]			1
IZhO 18-sequence	graph, dfs, topological sort, binary search	7		[119]			2
JOISC 19-designated-cities	graph, centroid-decomposition, dp_trees, [has another nice sol]	7		[123]			1
infoarena bvarcolaci	sqrt decomposition, math, dp, [Romanian txt], [A rather classical problem, turned into	7	Sol	[126]			1
Balkan 15-Happiness	segment tree, implicit, [hard text?]	7	Sol (no edit	[13]			2
infoarena kinder	segment tree, trie, [classical]	7	Sol	[13]			1
IZhO 12-apple	segment tree, dynamic	7		[13]			1
USACO 20feb-help	segment tree, dp	7		[13]			1
Balkan 12-Spiral	segment tree, dp, impl	7	Sol (no edit	[13]			

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
ROUSelection 18-xor_transform	dp, dp_sos, lucas's theorem, observations	7		[134]			1
JOISC 19-Cake3	bit, d&c, [similar to IOI 14-holiday[	7		[15]			2
Balkan 18-homecoming	dp, observations	7	#ERROR!	[16]			2
CEOI 06-Walk	dp, dp_output, tournament tree, [sp in grid with buildings]	7	Sol	[16]			2
infoarena cladiri	dp, ternary search, [Romanian txt]	7	Sol	[16]			1
infoarena zuma	dp, strings, [Romanian txt]	7	Sol	[16]			1
COI 10-kamion	dp	7	Sol	[16]			1
IOI 00-Blocks	bf, **long** impl	7	Sol	[2]			1
POI 08-Trains	todo, impl	7	Editorial	[222]		1	1
COCI 08-Cavli	todo, geometry	7	Editorial	[222]			
CEOI 10-Arithmetic	todo	7		[222]			
CEOI 10-Bodyguards	todo	7		[222]			
COI 17-raspad	todo, hmm, dijkstras?	7		[222]			
IOIPractice 17-cup	todo	7		[222]			
JOISC 13-Cake	todo, [**JAPANESE**]	7		[222]			
JOISC 14-Kanji	todo, [**JAPANESE**]	7		[222]			
JOISC 14-Scarecrow	todo, [**JAPANESE**]	7		[222]			
JOISC 15-Walls	todo, [**JAPANESE**]	7		[222]			
JOISC 16-Memory2	todo, [**JAPANESE**]	7		[222]			
CEOI 06-Connect	dp, dp_bitmasks, [cases]	7	Sol	[24]		1	6
infoarena anagrame	greedy, strings, [Romanian txt]	7	Sol	[32]			1
CEOI 04-Clouds	geometry, impl, [your own 128 bit], [idea not hard]	7	Sol	[37]			1
COCI 17-paralelogrami	geometry, bfs, impl, [No local submissions]	7	Editorial	[37]			
POI 11-wyk	geometry, ad-hoc, impl	7	Editorial	[37]			
CEOI 09-Tri	geometry	7	Editorial	[37]			
CEOI 13-adriatic	datastructures, optimization	7	Sol	[4]			1
APIO 10-Signaling	geometry, sweep line, cirles, combinatorics, impl, interactive, [https://tioj.ck.tp.edu.tw/	7	Sol	[44]			3
JOISC 17-cultivation	geometry, sweep line, datastructures, impl	7	Sol	[44]			
POI 15-Speed	geometry, sweep line	7	Editorial	[44]			
IOIPractice 16-network-rumour	geometry, sweep line, segment tree or sweep, bit, [**judge not working**]	7		[44]			
POI 04-Calgae	graph, impl, [sol translation doesn't work]	7	Editorial	[46]			1
Balkan 16-Acrobat	graph, 2-sat ?	7	Sol (no edit	[46]			
COCI 09-Holmes	~~graph theory, ad-hoc, [weird, avoid]~~	~~7~~	Editorial [1(	[46]			
POI 15-Highway	graph, dfs, impl	7	Editorial	[50]			
NOI 15-sudoku	graph, dijkstra	7	Editorial	[52]		2	2
USACO 19mar-Valleys-plat	graph, dsu, Euler's formula	7	Sol	[53]			1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
COCI 19-teoreticar	graph, euler tour	7		[54]			1
infoarena drumuri5 [11]	graph, scc, topo sort, dp, impl	7	Sol	[61]			1
IOIPractice 16-tree-nodes-destruction	graph, lca, greedy, [, **[judge not working]**]	7		[65]			
COCI 17-sazetak	math, mod inv, lcm, search	7		[96]			
POI 04-Tournament	ad-hoc, games or scc, topological sort, MLE	6.9	Sol	[1]	p4		10
infoarena xortransform	dp, dp_sos, lucas' theorem, xor, [solve first CSA78-E, a bit similar]	6.9	Sol	[134]	p4		7
COCI 16-kralj	greedy, dsu, observation	6.8	Sol	[32]	p5	3	9
APIO 10-Patrol	dp, dp_sibling, [cases]	6.8	Sol	[115]	p4		11
Balkan 18-election	segment tree	6.8	Sol	[13]	p4		10
JOI 13-BubbleSort [12]	bit, d&c or segment tree, lazy, bit, stack-style observation	6.8	Sol	[15]	p4		6
COCI 16-burza	dp, dp_bitmasks, dfs, game, induction principle	6.8	Sol	[24]	p4		8
POI 16-Not_Nim	game theory, math, greedy, [split to 2 sub-games - long proof]	6.8	Sol	[33]	p4		6
POI 09-Walk	graph, bfs, impl, implicit graph, [bfs to avoid cycle in dp], [strict tl/ml]	6.8	Sol	[48]	p4		8
JOISC 15-navigation	graph, dfs, trees, [communication style], [interesting use of the values of the nodes, o	6.8	Sol	[50]	p4		9
COI 15-zarulje	math, mod inv, combinatorics, stack, impl	6.8	Sol	[96]	p4		5
IOI 09-salesman	dp, dp_convex_hull, bit or dp, segment tree	6.8	Sol	[124]	p3	1	8
POI 09-Island	dp, dp_convex_hull, geometry	6.8	Sol	[124]	p3	1	2
USACO 18mar-sortplat	bit, observation	6.8		[15]	p3	3	7
Baltic 15-tug	dp, bitset, knapsack optimization	6.8	Sol	[16]	p3	1	9
COI 08-Izbori	dp, binary search	6.8	Sol	[16]	p3		5
POI 16-Nim	dp, dp_counting, dp_table, xor, indepndence, game theory (nim), [strict mem]	6.8	Sol	[26]	p3		4
IOI 19-rect	datastructures, stack or segment tree	6.8	Sol	[4]	p3	2	6
infoarena ssdj [13]	datastructures, stack, prefix max, impl	6.8	Sol	[4]	p3		5
COI 19-izlet	graph, constructive, trees, dsu, dfs	6.8	Editorial	[46]	p3		5
POI 09-Code	graph, dfs, trees	6.8	Sol	[50]	p3	1	4
COCI 17-sirni	graph, mst, **sieve**, math	6.8	Sol	[60]	p3		5
infoarena engineer	binary search, parallel binary search, datastructures	6.8	Sol	[9]	p3		3
POI 08-Kingdom	bf, **optimizations**, mask	6.8	Editorial	[2]	p2	1	4
POI 08-Triangles	geometry, binary search	6.8	Sol	[37]	p2		2
IOI 18-doll	segment tree, constructive, bst, simulation	6.75	Sol	[13]	p5	2	18
POI 06-Tetris_3D	segment tree, 2d, [properties allowed 2d]	6.75	Sol	[13]	p5		8
COI 07-Umnozak	dp, dp_digit	6.75	Sol	[114]	p4	1	10
COCI 08-Periodni	dp, dp_counting, mod inv, trees	6.75	Sol	[26]	p4		8
POI 06-Ploughing	greedy, dp, 2d prefix sums	6.75	Sol	[32]	p4	1	9
ROUSelection 17-1-rooms	greedy, flood-fill, **prefix sums**	6.75	Sol	[32]	p4		8
COCI 06-Prostor	geometry, sweep line, 2d bit, [cuboid intersections]	6.75	Sol	[44]	p4	1	5

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
POI 12-Salaries	graph, greedy	6.75	Sol	[46]	p4		8
POI 06-Frogs	graph, dijkstra, eculidan distances, observations	6.75	Sol	[52]	p4	2	7
JOISC 17-PortFacility	segment tree, greedy, bipartite graph or dsu, odd cycle	6.75	Sol	[13]	p3 v2		12
IZhO 19-segments	dp, binary search, greedy	6.75	Sol. See Sc	[16]	p3 v2	1	5
APIO 15-bridge	datastructures, math, **median**, [solve IOI 11-ricehub first]	6.75	Sol	[4]	p3 v1	1	10
APIO 16-gap	ad-hoc, d&c, interactive, pigeonhole principle	6.75	Sol	[1]	p3		11
IZhO 19-Xoractive	ad-hoc, bits, interactive	6.75	Sol	[1]	p3		7
IOI 12-supper	ad-hoc, datastructures, [communication], [solve POI 05-ToyCars first]	6.75	Editorial	[1]	p3	1	6
Info1Cup 18-Hidden	ad-hoc, interactive, impl	6.75	Sol	[1]	p3		4
COI 15-nafta	dp, dp_d&c_opt	6.75	Sol	[112]	p3		7
RusOI-reg 13-capitals	graph, centroid-decomposition, dsu-on-trees, dp, number theory	6.75	Sol	[123]	p3	1	6
POI 16-Christmas	sqrt decomposition, dsu or bit, binary search, dsu	6.75	Sol	[126]	p3		4
NOI 19-feast	dp, dp_alien or greedy, dp, [solve APIO 07-backup first], [=SACO 2008 Banquet]	6.75	Sol	[127]	p3		3
COCI 14-norma	segment tree, **impl**, [__int128 simplifies] or math, binary search	6.75	Sol	[13]	p3	1	6
infoarena fft2d [14]	dp, graph, datastructures	6.75	Sol	[16]	p3	1	6
infoarena turnuri	dp, deques or math, stack, [strict TL]	6.75	Sol	[16]	p3		6
JOISC 17-abduction2	dp, rmq	6.75	Sol	[16]	p3		4
infoarena matcnt [15]	dp, graph, math	6.75	Sol	[16]	p3		3
CEOI 12-race	dp, dp_ranges, [tricky states], [solve IOI 06-mexico first]	6.75	Sol	[31]	p3	1	5
Balkan 18-popa	greedy, graph, math, interactive	6.75	Sol	[32]	p3		5
CEOI 08-Fence	geometry, polygon, convex hull, floyd, cycles	6.75	Sol	[42]	p3		3
infoarena shgraf [16]	graph, Cayley's formula, dp_counting	6.75	Sol	[46]	p3		5
COCI 16-zamjene	graph, dsu, hashing	6.75	Sol	[53]	p3		6
infoarena unique [17]	graph, dsu, datastructures or bit	6.75	Sol	[53]	p3		5
NOI 19-riggedroads	graph, dsu, hard to impl or lca	6.75	Sol	[53]	p3		5
CEOI 04-Sweets	math, inclusion-exclusion, pascal, stars and bars] or dp_counting	6.75	Sol	[68]	p3		3
POI 11-sej	math, factorization, dfs	6.75	Sol	[85]	p3	1	4
Baltic 06-RLE	impl, observations, [careful impl]	6.75	Sol	[109]	p2		4
Balkan 12-BestTeams	segment tree, impl	6.75	Sol	[13]	p2	1	5
COCI 09-Aladin	segment tree, math, [standard]	6.75	Sol	[13]	p2	1	3
COCI 14-Kamioni	geometry, sweep line, impl	6.75	Sol	[44]	p2		2
POI 06-Sophie	graph, backtrack, greedy, [optimizations, max-independent-set NP hard]	6.75	Sol	[46]	p2	1	5
IOI 15-scales	backtrack, heuristics, **hard impl**, [not insightful]	6.75	Editorial	[5]	p2	3	5
IOI 11-elephants	sqrt decomposition, online insertion/deletion or link-cut tree, greedy	6.75	Sol	[126]	p1	2	8
IOI 15-teams	segment tree, greedy, persistent, binary search, [Combination of standard techniques	6.75	Editorial	[13]	p1	1	4
IZhO 14-marriage	graph, max-flow, bipartite match, two pointers	6.75	Sol	[58]	p1		2

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
POI 10-Ones	~~ad-hoc, bits, bignum, [annoying, avoid]~~	~~6.75~~	Editorial	[1]			
COCI 17-klavir	string processing, kmp, expected value	6.75	Sol	[102]			2
POI 11-okr	string processing, kmp, periods	6.75	Sol	[102]			1
Baltic 08-Magical	dp, dp_digit, **annoying impl**	6.75	Sol	[114]			1
IOI 14-wall	segment tree, lazy propagation	6.75	Editorial	[13]			6
JOIOC 18-CatsorDogs	dp, dp_trees, hld	6.75	Editorial	[136]		1	2
Baltic 19-necklace1	string processing, ad-hoc	6.75	Sol	[137]		1	4
JOISC 18-tents	dp, simple combinatorics	6.75	sol (See re	[16]			5
POI 07-Quaternary	dp, bignum, base conversion	6.75	Sol	[16]			1
CCO 12-WindsOfWar	dp , convex hull	6.75		[16]			1
JOISC 18-security_gate	dp, impl	6.75		[16]			
CEOI 07-Necklace	todo	6.75		[222]			
POI 14-Lamps	todo	6.75		[222]			
CEOI 12-highway	greedy, observation, impl, [cases]	6.75	Sol	[32]			2
POI 05-Camel	geometry, impl	6.75	Editorial	[37]			
POI 08-Plot	geometry	6.75	Editorial	[37]			
POI 10-Lamp	geometry, rectangles, impl ?	6.75	Editorial	[37]			
CEOI 18-Tri	geometry, polygon, convex hull, [merge hulls]	6.75		[42]		1	4
POI 14-AntColony_Mro	~~graph, trees, [problem doesn't open]~~	~~6.75~~		[46]			1
Baltic 15-fil	graph, dfs, cycles	6.75	Sol	[50]			2
COI 06-Sabor	graph, dfs, math	6.75	Editorial	[50]			2
IOI 15-sorting	binary search	6.75	Sol	[9]		2	10
USACO 20feb-deleg	binary search	6.75		[9]			1
IOI 19-vision	ad-hoc, constructive, interactive, manhattan distance, hard to impl	6.7	Sol	[1]	p5		7
COI 19-tenis	segment tree, lazy, graph, dynamic connectivity	6.7	Sol	[13]	p4		7
COI 15-ruka	bit or datastructures. **tricky to impl**	6.7	Sol	[15]	p4		8
CEOI 19-MagicTree	dp, dsu, map, [small-to-large]	6.7	Sol	[16]	p4		7
POI 06-Aesthetics	dp, binary search, [trick to reduce order]	6.7	Sol	[16]	p4	1	6
APIO 17-merchant	graph, floyd, binary search	6.7	Sol	[55]	p4		11
COCI 09-Palacinke	math, matrix, matrix pow, inclusion-exclusion, matrix difference, [reccurence on a gra	6.7	Sol	[89]	p4		9
USACO 16dec-roboherd-plat	binary search, datastructures	6.7		[9]	p4		5
IOIPractice 16-k-consecutive	dp, permutations, [split to 2 seperate subproblems], [=infoarena kcons]	6.7	Sol	[16]	p3		6
infoarena xreverse [18]	dp, dp_d&c	6.7	Sol	[16]	p3	1	5
POI 04-Maximal	dp, cyclic permutation, primes, gcd, bignum [using double percision], [smaller constra	6.7	Sol	[16]	p3	1	5
Baltic 06-Bitwise	greedy, bits, impl, [misleading constraints]	6.7	Sol	[32]	p3	2	8
POI 15-Three	ad-hoc, observations, [casework]	6.7	Sol	[1]	p2		4

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
infoarena deletegcd [19]	math, sieve, datastructures, impl	6.7	Sol	[93]	p2		5
NOI 14-obelisk	graph, floyd, implicit graph, math, impl, [last task tedious]	6.7	Sol	[55]		5	9
IOI 07-sails [20]	segment tree, greedy, sweep, observations or bit, [solve first CSA41-E https://csacad	6.6	Sol	[13]	p4		14
IZhO 17-subsequence	dp, dp_bitmasks, meet in middle, [strict time]	6.6	Sol	[24]	p4		11
POI 04-Gates	greedy, [choose-later-correct]	6.6	Sol	[32]	p4	3	8
infoarena ratway	graph, euler tour	6.6	Sol	[54]	p4		4
POI 05-Fibonacci	greedy, fibonacci, constructive	6.6	Sol	[32]	p3 v3	2	7
IOI 04-empodia	ad-hoc, sweep, bit or stack, set	6.6	Sol	[1]	p3 v2		9
COCI 15-uzastopni	dp, dp_trees, bitset	6.6	Sol	[136]	p3 v2		13
COCI 17-osmosmjerka	string processing, hashing, probability, [double hashing]	6.6	Sol	[137]	p3	1	6
COCI 14-Stanovi	dp, dp_subrectangle, dp_counting, impl	6.6	Sol	[20]	p3		6
Baltic 17-PoliticalDevelopment	graph, bf, clique, [fixed parameter technique (FPT)]	6.6	Sol	[46]	p3		11
COCI 14-Police	graph, dfs, lis, combinatorics	6.6	Sol	[50]	p3	1	6
POI 11-Contest	graph, max-flow, bipartite match, [variant]	6.6	Sol	[58]	p3	2	5
IOI 01-depot	bf, ad-hoc, permutations, [optimizations is the hard part]	6.6	Sol	[2]	p2	3	7
CEOI 08-Snake	binary search, interactive, [tedious]	6.6	Sol	[9]	p2	2	6
CEOI 11-Teams	datastructures, stack, impl or dp	6.6	Sol. Find O	[4]		1	2
Baltic 16-cities	graph, dijkstra, masks, steiner trees	6.5	Sol	[52]	v2	1	5
Baltic 14-coprobber	graph, dfs, topological sort, game theory, [interesting topo]	6.5	Sol	[119]	p4 v2	1	20
USACO 18mar-sortgold	datastructures, heap, observation or bit	6.5	Sol [21]	[4]	p4 v2		12
IOI 02-Utopia [22]	ad-hoc, construcive, [independece], [seems very close to IOI 05-birthday]	6.5	Sol	[1]	p4		6
POI 05-Template	string processing, kmp, observations	6.5	Sol	[102]	p4		3
CEOI 16-Kangaroo	dp, dp_component	6.5	Sol	[131]	p4	6	22
IOI 05-rivers	dp, dp_trees, floyd, [harder limits CEOIPractice 17-Museum]	6.5	Sol	[136]	p4	1	9
Baltic 10-Candies	dp, knapsack, ad-hoc, prime module, [some tricks in also CF981-D12-E]	6.5	Sol	[16]	p4	1	10
USACO 12nov-cbs-gold	datastructures or segment tree, presistent [https://github.com/win11905/submission/b	6.5		[4]	p4		10
CEOI 17-OneWay	graph, scc, dsu, edges, [one can avoid LCA], [https://codeforces.com/blog/entry/6813	6.5	Sol	[61]	p4	1	13
IOI 07-flood	graph, bfs, 0-1 bfs, flood-fill or dfs, convex hull-like iterating	6.5	Sol	[48]	p3 v2	3	11
OSN 16-1B	ad-hoc, intetractive	6.5	Sol	[1]	p3	1	8
MCO 17-LargeCity	ad-hoc, datastructures, observation	6.5	Editorial	[1]	p3	1	7
IOI 00-median [23]	ad-hoc, quick sort, randomization or datastructures, heap, impl	6.5	Sol	[1]	p3		6
POI 05-Points [24]	ad-hoc, geoemtry, center of gravity, cyclic shifts, [precision issues]	6.5	Sol	[1]	p3	1	2
COCI 19-simfonija	ad-hoc, **slope_trick** or others	6.5	Sol	[1]	p3		2
COI 08-Otoci	graph, hld, sqrt decomposition, [**strict** TL on dmoj]	6.5	Sol	[122]	p3	1	3
JOIOC 14-pinball	segment tree, dp	6.5	Sol	[13]	p3	1	11
POI 09-Ice_Skates	segment tree, max subarray sum	6.5	Sol	[13]	p3		10

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
COCI 15-Nekameleoni	segment tree, d&c, bitmasks, optimization, [repeated]	6.5	Sol	[13]	p3	1	6
Infoarena tricolor [25]	dp, dp_trees, [skip unused states]	6.5	Sol	[136]	p3		6
infoarena radare [26]	dp, dp_trees. [dfs traversal for optimization]	6.5	Sol	[136]	p3	1	5
Baltic 16-swap	dp, binary tree, [restricted time and memory]	6.5	Sol	[16]	p3	3	6
CEOI 09-Photo	dp, rectangles, ad-hoc	6.5	Sol	[16]	p3	1	6
COCI 08-Dostava	dp or dijkstra, impl	6.5	Sol	[16]	p3		5
POI 16-Messenger	dp, [also https://www.youtube.com/watch?v=8CTteoBqW6A]	6.5	Sol	[16]	p3		5
POI 13-Polarization	dp, knapsack, trees, math, [educational]	6.5	Sol	[16]	p3		3
USACO 12dec-gangs	bf, greedy, [lexicographically smallest sequence] or dp	6.5	Sol	[2]	p3		6
Baltic 08-Game	dp, dp_games, dp_table, bfs, 2d grid	6.5	Sol	[28]	p3		4
IOIPractice 16-balanced-string	greedy, d&c, induction, [cases]	6.5	Sol	[32]	p3	1	7
COCI 15-Endor	greedy or dp	6.5	Sol	[32]	p3		7
POI 04-Game	game theory, nim, [staircase nim]	6.5	Sol	[34]	p3		2
CEOI 05-Fence	geometry, prefix sum, interactive	6.5	Sol	[37]	p3	1	4
COCI 11-traka	geometry, optimization, convex hull trick, [=SPOJ TRAKA]	6.5	Editorial	[37]	p3		2
USACO 16dec-triangles-plat	geometry	6.5		[37]	p3		2
COCI 06-Straza	geometry, lines	6.5	Sol	[39]	p3		2
USACO 18dec-balanceplat	geometry, polygon, convex hull or math, convexity, datastructures	6.5	Sol	[42]	p3		2
POI 04-Islands	geometry, sweep line or segment tree, prefix sum	6.5	Sol	[44]	p3	2	6
Baltic 12-Fire	geometry, sweep line, math	6.5	Sol	[44]	p3		3
Baltic 16-park	graph, circles, dus or sp	6.5	Sol	[46]	p3	3	10
infoarena maxdist [27]	graph, tree, impl, [dynamic trick]	6.5	Sol	[46]	p3		6
IOI 02-Bus [28]	graph, ad-hoc, tree diameter, greedy	6.5	Sol	[46]	p3	1	6
CCO 17-Connection	graph, online bridges, binary search, parallel, [https://cp-algorithms.com/graph/bridge	6.5	Sol	[46]	p3		6
infoarena amici2 [29]	graph, bfs, math, [strict tl]	6.5	Sol	[48]	p3		6
CEOI 15-indcyc	graph, dfs, constructive	6.5	Sol	[50]	p3	1	7
Baltic 07-Fence	graph, dijkstra grid compress, geometry scanline. [harder version fences]	6.5	Sol	[52]	p3		3
CEOI 05-Depot	graph, euler tour	6.5	Sol	[54]	p3	1	9
COCI 08-Slicice	graph, max-flow	6.5	Sol	[56]	p3		3
infoarena casute [30]	graph, lca, DAG or bfs, bitset [educational - LCA on dag], [strict TL]	6.5	Sol	[65]	p3		6
COCI 20-putovanje	graph, lca, fenwick-tree, todo link	6.5	Sol	[65]	p3		1
infoarena perioada	math, number theory, hashing	6.5	Sol	[68]	p3		2
USACO 18jan-sprinklers-plat	math, combinatorics, two pointers, [complementary counting], [~=COCI 19-strah, repe	6.5	Sol	[82]	p3	3	7
COI 09-Kolo	math, sieve, mod, simulation	6.5	Sol	[93]	p3		5
POI 08-Permutation	math, mod inv, factorization, tree, impl	6.5	Sol	[96]	p3		2
CEOI 15-teams	dp, dp_counting, dp_table, dp_roll, cases, lexi	6.5	Sol	[26]	p2 v2	3	21

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
infoarena paintball	graph, dfs, bfs, observation	6.5	Sol	[50]	p2 v2		5
IOI 17-prize	ad-hoc, d&c, interactive, [solve APIO 16-gap first is helpful], [constant optimization], [p	6.5	Sol	[1]	p2	3	11
COI 08-Plahte	impl, [hard to impl], [easy idea]	6.5	Editorial	[109]	p2		1
USACO 16feb-cbarn-plat	dp, dp_d&c_opt, [get rid of dp cycle]	6.5	Sol	[112]	p2		4
Baltic 07-Points	dp, dp_profile, matrix, matrix pow	6.5	Sol	[116]	p2	1	3
infoarena mindist	sqrt decomposition, Manhattan2DRotation or segment tree	6.5	Sol	[126]	p2		3
IOI 03-code	string processing, hashing, binary search, **impl**, [easy idea]	6.5	Sol	[137]	p2		2
IOI 07-pairs	bit, 2d bit, Manhattan2DRotation, **impl**	6.5	Editorial	[15]	p2	2	6
USACO 20dec-pieaters-plat	dp, permutation, observation	6.5		[16]	p2		5
Baltic 12-Brackets	dp, brackets, optimizations	6.5	Sol	[16]	p2		3
USACO 19jan-tracking2_plat	dp, combinatorics	6.5		[16]	p2		2
Infoarena culmi	dp, bignum, impl or, math, closed form, [Narayana number]	6.5	Sol	[16]	p2		1
JOI 19-Coin	greedy, [JOI19_ho_t4]	6.5	Sol	[32]	p2		4
Baltic 05-Polygon	geometry, polygon, circle, binary search, constructive	6.5	Sol	[40]	p2		3
USACO 18dec-gathering	graph, euler tour or others	6.5		[54]	p2		4
USACO 19dec-plat-pieaters	dp, dp_ranges	6.5	Sol	[31]	p1 v2		4
COCI 07-Baza	string processing, trie or search, datastructures, [optimizations], [easy idea]	6.5	Sol	[101]	p1		2
IOI 12-rings	graph, dsu, cycles, **impl**	6.5	Sol	[53]	p1	2	7
IOI 10-languages	ad-hoc, heuristics, tuning	6.5	Editorial	[1]		1	4
Baltic 17-PlusMinus	ad-hoc	6.5	hints	[1]			3
JOIOC 19-Remittance	ad-hoc, [hard to prove]	6.5	Sol	[1]			3
CCO 18-WrongAnswer	ad-hoc, constructive	6.5	Sol	[1]			2
Baltic 18-Genetics	ad-hoc, string, hashing	6.5	Editorial	[1]		1	2
IOIQ 19-d2-D	ad-hoc, math	6.5		[1]		1	2
COI 14-css	ad-hoc, string parsing, [boring]	6.5		[1]			
COI 18-pick	ad-hoc, cases, impl	6.5		[1]			
IZhO 19-lyuboyn	ad-hoc, bits ??	6.5		[1]			
COCI 20-klasika	string processing, trie, [todo link]	6.5		[101]			1
Balkan 15-Clarkson	string processing, suffix array, rmq, binary search	6.5	Sol (no edit	[104]			
ROUSelection 18-count_bst	bst, catlan, mod inv, formula	6.5		[108]			1
IOI 03-robots	impl, dfs, parsing input	6.5	Sol	[109]			2
Infoarena Calancea	~~two pointers, data structures, [Romanian txt], [=IOIPractice 16-increasing_subarrays.~~	~~6.5~~		[110]			~~1~~
CEOI 02-Bugs	dp, dp_profile, impl	6.5	Sol	[116]			2
APIO 19-street_lamps	segment tree, impl	6.5	Sol	[13]		1	3
COCI 15-relativnost	segment tree, polynomial, [repeated]	6.5	Sol	[13]		1	3
COCI 17-garaza	segment tree, [hard state]	6.5	Editorial	[13]			2

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
JOI 20-Fire	bit, JOI20_ho_t5	6.5	Official Coc	[15]			
JOI 16-GeologicFault	bit, binary search or segment tree, [**JAPANESE**]	6.5		[15]			
Balkan 18-parentrises	dp	6.5	Editorial	[16]			2
CEOI 16-popeala	dp	6.5	Sol	[16]		1	2
infoarena ksecv	dp, [Romanian txt]	6.5	Sol	[16]			1
NOI 11-tour	dp, impl or bfs, pruning	6.5	Sol	[16]			1
COCI 18-vrtic	dp, impl	6.5		[16]			
CEOI 07-Airport	todo	6.5		[222]			
CEOI 07-Treasury	todo, [https://dunjudge.me/analysis/problems/756/]	6.5		[222]			
CEOI 10-Alliances	todo, [https://dunjudge.me/analysis/problems/750/]	6.5		[222]			
CEOI 10-MP3player	todo	6.5		[222]			
POI 13-mul	todo, long impl, dfs	6.5		[222]			
ROUSelection 18-towns	todo, hmm	6.5		[222]			
APIO 15-sculpture	greedy, dp, [=CF981-D12-D]	6.5	Sol	[32]			8
CEOI 13-board	greedy, bitset, datastructures, impl, [boring?]	6.5	Sol	[32]			5
IOI 08-teleporters	greedy, observation, graph, prove	6.5	Editorial	[32]		1	5
POI 16-Necklace	greedy, pruning, long code or dp, short code	6.5	Sol	[32]		1	2
ROJS 17-palindromic_tree	greedy, pattern, palindromes	6.5		[32]			1
CEOI 14-007	game theory, bfs, dp , [cases, editorial]	6.5	Sol	[33]			2
USACO 15jan-gold_cowrect	geometry, line sweep	6.5		[37]			1
POI 05-Manoeuvres	geometry	6.5	Editorial	[37]			
IOI 15-horses	datastructures or segment_tree, bst, [logarithms]	6.5	Editorial	[4]		2	10
CEOI 13-tram	datastructures, greedy	6.5	Sol	[4]			2
infoarena cover	datastructures, min deque	6.5	Sol	[4]			2
USACO 17feb-friendcross	datastructures	6.5		[4]			2
COI 14-kosta	datastructures, long impl, [boring]	6.5	Editorial	[4]			1
COCI 16-meksikanac	geometry, polygon, fft	6.5	Editorial	[40]		1	1
COI 16-relay	geometry, polygon, tangents, cases, [boring]	6.5	Sol	[40]			1
Balkan 16-Cruise	geometry, polygon, convex hull, bit, binary search ?	6.5	Sol (no edit	[42]			
COI 15-sir	geometry, polygon, convex hull	6.5	Editorial	[42]			
EJOI 17-particles	geometry, polygon, convex hull	6.5		[42]			
JOIOC 17-amusementPark	graph, [DOWNLOAD cases], [communication style]	6.5	Sol	[46]		1	4
POI 13-Tower_Defense_Game	graph	6.5	Editorial	[46]			1
JOI 20-OlympicBus	graph, dijkstra, todo, JOI20_ho_t4	6.5	Official Coc	[52]		1	1
JOI 14-SugarGlider	graph, dijkstra?, [**JAPANESE**], [long txt - don't assign - Riya don't understand]	6.5		[52]			
USACO 20jan-cave-plat	graph, dsu	6.5		[53]			1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
JOISC 13-Jamming	graph, dsu, [**JAPANESE**]	6.5		[53]			
POI 11-Garbage	graph, euler tour, optimization, [POI11_smi]	6.5	Sol	[54]			1
APIO 09-ATM	graph, scc, dp_sibling, [https://www.acmicpc.net/category/detail/223]	6.5	Sol	[61]		1	4
COCI 07-Staza	graph, scc, biconnected components, d&c, bf	6.5	Sol	[64]		1	2
USACO 17dec-pushabox-plat	graph, scc, biconnected components, impl, [direct]	6.5		[64]			2
infoarena hacker2 [31]	graph, lcal, binary lifting, dfs, trees, impl	6.5	Sol	[65]		1	2
JOIOC 14-fortune_telling2	binary search, parallel binary search, segment tree	6.5		[9]			6
Balkan 11-Trapezoid	segment tree, persistent, dp, sweep	6.4	Sol	[13]	p4	2	18
infoarena aiacubiti [32]	dp, meet in middle, bitmasks	6.4	Sol	[16]	p4		7
COCI 15-galaksija	graph, dsu, math, xor, [small-to-large] or centroid-decomposition	6.4	Sol	[53]	p4		9
NOI 14-cats	math, formula or **pattern**, constructive	6.4	Sol	[72]	p4	4	8
IOIPractice 16-increasing_subarrays	two pointers, deque, ad-hoc, [=infoarena calancea]	6.4	Sol	[110]	p3 v2	1	8
Infoarena Desc [33]	dp, math, divisors, [weak cases?]	6.4	Sol	[16]	p3 v2		7
Baltic 09-Subway [34]	greedy, binary search, math	6.4	Sol	[32]	p3 v2	1	6
JOISC 19-Naan	greedy, math	6.4	Sol	[32]	p3 v2		6
CEOI 02-Fence	dp, dp_knuth, dp_counting, impl, permutation, [similar: AtCoder-dp_t https://atcoder.	6.4	Sol	[128]	p3		7
JOI 19-GrowingVegetable	dp, dp_counting, [JOI19_ho_t3], [dp table creation during run time], [mix of old tricks]	6.4	Sol	[26]	p3		14
PO Kattis	geometry, convex hull, stack, greedy	6.4	Sol	[37]	p3		1
POI 18-Plan_Metra	graph, trees, constructive	6.4	Sol	[46]	p3		9
USACO 18mar-disrupt-plat	graph, dfs, [small-to-large] or hld or rmq	6.4	Sol	[50]	p3		9
JOI 18-commuterpass	graph, dijkstra, dp	6.4	Sol	[52]	p3		11
POI 16-Streets	graph, scc, topological sort, impl	6.4	Sol	[61]	p3	1	7
IOI 09-regions	sqrt decomposition, prefix sum or euler tour, two pointers, [easy if saw idea before]	6.4	Sol	[126]	p2		6
CEOI 02-Guards	graph, max-flow, bipartite match	6.4	Sol	[58]	p2		7
CEOIPractice 17-Museum	dp, dp_trees or dp_sibling (slow), [easier limits IOI 05-rivers)	6.3	Sol	[136]	p4 v2		9
JOI 18-Dangomaker	dp, [dp on diagonal, non-standard]	6.3	Sol	[16]	p4 v2	2	21
COCI 19-transport	graph, centroid-decomposition, bit	6.3	Sol	[123]	p4	1	6
POI 11-Lollipop	greedy, POI11_liz	6.3	Sol	[32]	p4		3
COCI 18-planinarenje	graph, max-flow, bipartite match	6.3	Editorial	[58]	p4		5
COI 07-Kolekcija	dp, dp_build_output, greedy, two pointers. impl	6.3	Sol	[111]	p3 v2		8
APIO 07-Zoo	dp, dp_bitmasks, sliding window, [max-sat]	6.3	Sol	[24]	p3 v2	1	6
POI 14-Panels	math, number theory, sqrt or sqrt decomposition	6.3	Sol	[68]	p3 v2		8
DMOPC 18-BobEnglishClass	graph, centroid-decomposition, greedy, dfs, [=CF752-D12-F]	6.3	Sol	[123]	p3		5
COI 14-krave	segment tree, tournament tree	6.3	Sol	[13]	p3	1	6
CEOI 14-cake	segment tree, ad-hoc, **nice to impl**	6.3	Sol	[13]	p3		6
COCI 07-Cestarine	dp, greedy, all permutations	6.3	Sol	[16]	p3		9

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
POI 12-Squarks	greedy, brute force, math	6.3	Sol	[32]	p3		6
POI 14-Little_Bird	greedy, monotonic queue, simulation	6.3	Sol	[32]	p3		5
Baltic 15-hac	game theory, stl or segment tree, sliding window. [monotone queue]	6.3	Sol	[33]	p3		7
COCI 16-mag	graph, ad-hoc, dp_trees	6.3	Sol	[46]	p3		7
POI 04-East_West	graph, impl, [MLE, memory optimizations]	6.3	Sol	[46]	p3	1	5
IOI 11-garden	graph, dfs, cycles, **impl, [**functional graph**]**	6.3	Sol	[50]	p3	2	15
COCI 17-ceste	graph, dijkstra, optimization, [multi-critiera]	6.3	Sol	[52]	p3		7
Baltic 12-Peaks	graph, dsu, flood-fill, hard impl	6.3	Sol	[53]	p3		8
Baltic 19-valley	graph, lca, dfs	6.3	Sol	[65]	p3		11
Balkan 11-decrypt	math, xor, periods, random numbers, interactive	6.3	Sol	[68]	p3	1	6
COCI 08-Trezor [35]	math, inclusion-exclusion, gcd, primes	6.3	Sol	[86]	p3	1	5
infoarena password2 [36]	binary search, interactive, [easier version infoarena interact]	6.3	Sol	[9]	p3		7
COI 16-torrent	binary search, dfs	6.3	Sol	[9]	p3		6
COI 14-mostovi	graph, stl, [tricky to short impl], [easy idea]	6.3	Editorial	[46]	p2		1
ROJS 17-borland	ad-hoc, d&c, two pointers, modular inverse, [using less than O(n) memory]	6.3	sol	[1]			5
CEOI 02-Dwarfs	geometry, angles, convex hull, [slow input on https://www.acmicpc.net/problem/7057	6.3	Editorial	[37]			1
infoarena curent	graph, trees, data structures, [Romanian txt]	6.3	Sol	[46]			2
POI 05-Banknote	dp, [bounded knapsack] or ad-hoc, stl or dp_convex_hull, deque	6.25	Sol	[16]	p5		8
TOKIOpen 18-GroupChat	binary search, greedy, [Manhattan distance to Chebysehv distance trick - Manhattan2	6.25	Sol	[9]	p5	2	15
POI10 sums	graph, dijkstra, summations, diphontine or math, [POI 03-sums, dijikstra on modulo gı	6.25	Sol	[52]	p4 v3	2	30
CEOI 13-treasure2	dp, dp_counting, prefix sum or d&c, inclusion-exclusion, [interactive]	6.25	Sol	[26]	p4 v2	1	19
IOI 14-friend	graph, greedy or dp, inductive graph transformation	6.25	Sol	[46]	p4 v2	3	18
USACO 15feb-gold_censor	ad-hoc, hashing, integer partitions	6.25		[1]	p4		4
USACO 17dec-standingout-plat	string processing, suffix array	6.25		[104]	p4		5
POI 11-Conductor	dp, dp_convex_hull or dp_d&c or segment tree or ad-hoc, [POI11_pio]	6.25	Sol	[124]	p4		10
infoarena arb3	dp, dp_trees, binary search	6.25	Sol	[136]	p4		6
IZhO 14-blocks	dp, optimal splitting, minque or monotonic stack	6.25	Sol	[16]	p4	1	13
Balkan 09-Reading	dp, matrix pow	6.25	Sol	[16]	p4	1	3
IOI 04-polygon	geometry, polygon, Minkowski sum	6.25	Sol	[40]	p4		1
CEOI 17-Chase	dp, dp_trees	6.25	Sol	[136]	p3 v2	1	13
IOI 05-birthday	binary search or ad-hoc, permutations, [seems very close to IOI 02-Utopia]	6.25	Sol	[9]	p3 v2	1	10
CEOI 10-Tower	ad-hoc	6.25	Sol	[1]	p3		4
COCI 17-rima	string processing, trie, dp	6.25	Editorial	[101]	p3		6
USACO 19feb-plat_mooriokart	sqrt decomposition, dp or dp	6.25	Sol	[126]	p3	1	5
CCO 18-boring	sqrt decomposition	6.25	Sol	[126]	p3	1	3
IOIPractice 14-guardians-lunatics-ioi14	dp, dp_knuth or dp_d&c_opt	6.25	Sol - must ı	[128]	p3		8

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
IZhO 12-biochips	dp, dp_trees, euler tour, [amortizd analysis]	6.25	Sol	[136]	p3	1	14
COCI 18-dostavljac	dp, dp_trees	6.25	Sol	[136]	p3	1	7
USACO 15feb-gold_hopscotch	bit, dp	6.25		[15]	p3		6
USACO 16feb-balancing-plat	bit, binary search or segment tree	6.25		[15]	p3		2
OII 18-cena	dp, datastructures or greedy, combinatorics	6.25	Sol	[16]	p3	1	9
Baltic 12-Melody	dp, bfs ,constructive, optimize	6.25	Sol	[16]	p3		8
Baltic 13-brunhilda	dp, greedy, primes, monotonicity, [mathy proof}]	6.25	Sol	[16]	p3	1	6
USACO 18jan-lifeguards-plat	dp, deque, [easy impl]	6.25	Sol	[16]	p3		6
CEOI 19-cubeword	dp, math, meet in middle	6.25	Editorial	[16]	p3	1	4
infoarena sormin [37]	dp, binary search or ad-hoc, bitmasks, knapsack	6.25	Sol	[16]	p3		4
POI 10-Sheep	dp, geometry, triangulation, [solve first POI 06-Invasion]	6.25	Sol	[16]	p3		3
IOIPractice 16-polygon_partition	dp, polygon, mod inv	6.25	Sol	[16]	p3		3
CEOI 05-Ticket	greedy, [https://dunjudge.me/analysis/problems/555/]	6.25	Sol	[32]	p3	1	5
Baltic 08-Gloves	geometry, bitmasks or convex hull-like, sets	6.25	Sol	[37]	p3		5
CEOI 18-Lottery	datastructures, impl, [tight memory]	6.25	Sol	[4]	p3		11
COCI 19-strah	datastructures, stack, d&c, prefix, [COCI18_strah]	6.25	Sol	[4]	p3	1	6
JOISC 19-Mergers	graph, greedy or dsu-on-trees or lca, [think in proof]	6.25	Sol	[46]	p3		8
CEOI 16-router	graph, math, constructive, [output-only]	6.25	Sol	[46]	p3		3
COI 17-ili	graph, ad-hoc, floodfill, circuts, impl, [easy idea]	6.25	Sol	[46]	p3		2
USACO 16feb-fencedin-plat	graph, mst, ad-hoc	6.25		[60]	p3		1
Balkan 12-Fan_Groups	graph, scc, topological sort	6.25	Sol	[61]	p3	1	6
APIO 19-strange_device	math, sorting, mod, gcd	6.25	Sol	[68]	p3		5
infoarena permsort2 [38]	math, cyclic permutation, bit, patterns	6.25	Sol	[84]	p3		7
IOI 11-crocodile	graph, dijkstra	6.25	Editorial	[52]	p2 v2		9
APIO 09-Oil	ad-hoc, d&c, 2d prefix sums, 2d sliding window, impl [https://www.acmicpc.net/catego	6.25	Sol	[1]	p2	1	12
Baltic 19-olympiads	ad-hoc, fracturing search	6.25	Sol	[1]	p2		3
USACO 18feb-newbarn-plat	graph, centroid-decomposition or lca, tree diameter, [almost direct]	6.25		[123]	p2		7
COI 19-ljetopica	dp, [close to USACO 14open-silver-odometer]	6.25	Sol	[16]	p2		2
Baltic 10-Lego	dp, backtrack, impl	6.25	Editorial	[16]	p2	1	2
IOI 09-hiring	greedy	6.25	Editorial	[32]	p2		4
COCI 07-Pravokutni	geometry, ordered_set	6.25	Sol	[37]	p2		2
COCI 14-Kamp	graph, cc, dfs, dp, impl	6.25	Sol	[46]	p2		1
IOI 08-islands	graph, dfs, cycles, ad-hoc, [MLEs]	6.25	Editorial	[50]	p2	2	8
IOI 14-game	graph, dsu, birdges, constructive, greedy	6.25	Sol	[53]	p2		20
Baltic 14-postmen	graph, euler tour, [basic, just strict TL]	6.25	Sol	[54]	p2		2
CEOI 04-Football [39]	math, ad-hoc, round-robin	6.25	Sol	[68]	p2	2	3

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
CEOI 06-Meandian	ad-hoc	6.25	Sol	[1]		1	2
JOISC 13-Messenger	ad-hoc, games, interactive?, [JAPANESE]	6.25		[1]			
COCI 18-clickbait	impl, graph, constructive	6.25		[109]			2
COI 17-zagrade	graph, centroid-decomposition or subtree set merging	6.25	Sol	[123]			4
APIO 14-Sequence	dp, dp_convex_hull or dp_d&c_opt, [strict time, easy for one knows these techniques	6.25	Sol	[124]		1	13
APIO 10-Commando	dp, dp_convex_hull, math, [type 1, =SPOJ APIO10A, ~=kattis coveredwalkway]	6.25	Sol	[124]			9
Baltic 17-Toll	segment tree, matrix pow, [~=POI fib]	6.25	Sol	[13]			3
COCI 17-plahte	segment tree, sweep line	6.25	Editorial	[13]			2
POI 15-Movie	segment tree	6.25	Editorial	[13]			1
CEOI 09-Harbingers	segment tree, LiChao or datastructures, binary search, geometry	6.25	Editorial	[13]			1
COI 15-dostava	~~segment tree, sweep line, [**no submit**], [test data: last entry here http://hsin.hr/2015/]~~	~~6.25~~	Editorial	[13]			~~1~~
POI 18-Polynomial	math, fft	6.25	Sol	[138]			1
POI 15-Squares	dp, [bf to get observations and pattern]	6.25	Sol	[16]		2	3
IOI 06-mexico	dp, [https://www.iarcs.org.in/inoi/online-study-material/problems/mexico-soln.php]	6.25	Editorial	[16]		1	2
infoarena aiacupalindroame	dp, dfs, hash, [Romanian txt]	6.25	Sol	[16]			1
IOI 01-ioiwari	dp, game or game theory, ad-hoc, greedy	6.25	Editorial	[16]			1
POI 13-Taxis	todo, [POI13_tak]	6.25		[222]			1
CEOI 07-Ministry	todo	6.25		[222]			
JOISC 14-Voltage	todo, [**JAPANESE**]	6.25		[222]			
JOISC 16-Sandwich	todo, [**JAPANESE**]	6.25		[222]			
JOISC 16-Skating	todo, [**JAPANESE**]	6.25		[222]			
JOISC 16-Solitaire	todo, [**JAPANESE**]	6.25		[222]			
JOISC 16-Sushi	todo, [**JAPANESE**]	6.25		[222]			
JOISC 16-Toilets	todo, [**JAPANESE**]	6.25		[222]			
POI 16-Stutter	dp, dp_table, LCS-like, some memory optimizations	6.25	Sol	[23]			1
JOISC 17-long_mansion	greedy, [See JOISC-17-abduction2.txt]	6.25	Sol	[32]		1	3
COCI 09-Pasijans	greedy, datastructures, hashing, [standard]	6.25	Editorial	[32]			1
NOI 15-banana_farm	datastructures, [~=SPOJ MKTHNUM]	6.25	Editorial	[4]			1
JOISC 13-Construct	graph, dsu, impl, hmm, [**JAPANESE**]	6.25		[53]			
infoarena jap2	math combinatorics, [Romanian txt], [easy idea]	6.25	Sol	[68]			1
infoarena meneaito	math, implementation, [Romanian txt]	6.25	Sol	[68]			1
RusOI-reg 16-sequence	math, formula, binary search, convex function	6.25		[72]			1
IZhO 13-school	greedy, datastructures, [hard to prove]	6.1	Sol	[32]	p4		8
IOIPractice 17-coins	math, xor, interactive, [communication style]	6.1	Sol	[68]	p4		8
APIO 15-skyscraper	graph, dijkstra, [some tricks]	6.1	Sol	[52]	p3 v2	1	16
Baltic 19-nautilus	ad-hoc, bitsets or dp, [educational]	6.1	Sol	[1]	p3		9

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
USACO 19mar-balancing-gold	ad-hoc, observation	6.1		[1]	p3	1	6
IOI 02-Batch	dp or dp_convex_hull	6.1	Sol	[16]	p3		4
COCI 09-Xor	geometry, inclusion-exclusion	6.1	Sol	[37]	p3		2
IZHO 18-plan	graph, lca, mst or parallel binary search or dijkstra, mst	6.1		[65]	p3		8
POI 14-Criminals	geometry, sweep line	6.1	Sol	[44]	p1		2
infoarena arb	segment tree, trees	6.1		[13]			2
UTSOpen 15-Pogo	dp, dp_couning	6.1		[16]			3
POI 15-Gluttons	dp, dp_bitmasks, [others faced MLE?]	6.1	Sol	[24]		2	4
IZhO 14-shymbulak	graph, cycles, datastructures, smart impl	6.1	Sol	[46]		1	7
infoarena overpower	math, number theory	6.1	Sol	[68]			1
IOI 13-robots	datastructures, binary search, greedy	6	Sol	[4]	p5 v1		17
RMI 17-D1-Hangman 2	string processing, rolling hash, bf, [strict tl]	6	Sol	[105]	p4		7
COCI 09-snowwhite	mo's algorithm, segment tree, Boyer-Moore majority vote	6	Sol	[107]	p4	1	9
Baltic 13-pipes	graph, dfs, topological sort, math	6	Sol	[119]	p4	3	19
COCI 15-vudu	bit, grid compress or segment tree	6	Sol	[15]	p4		9
COCI 16-vjestica	dp, dp_bitmasks, mask-all-subsets, [split to 2 masks and process independently]	6	Sol	[24]	p4	1	13
USACO 17jan-tallbarn-plat	greedy, binary search, quadratic equation ,titu's lemma	6	Sol	[32]	p4	1	14
CEOI 08-Knights	game theory, pattern	6	Sol	[33]	p4	1	6
JOISC 15-inheritance	graph, dsu, greedy	6	Sol	[53]	p4		7
COCI 18-pictionary	graph, mst, or lca	6	Sol	[60]	p4		10
IZhO 18-treearray	graph, lca, observations, sets	6	Sol	[65]	p4		11
Baltic 09-Beetles	dp, dp_ranges, dp_table, dp_roll	6	Sol	[31]	p3 v2		14
POI 07-Pipelines	greedy, sorting, sweep, observation, grid	6	Sol	[32]	p3 v2		6
POI 07-Tetris	greedy, stack	6	Sol	[32]	p3 v2		5
Baltic 17-Railway	graph, trees, prefix sums or dsu-on-trees, [merge trees]	6	Sol	[46]	p3 v2	1	13
POI 06-Invasion	ad-hoc, binary search, geometry, polygon, triangles	6	Sol	[1]	p3		4
MCO 17-NewbieHacker	string processing, kmp, z-algo, bit or rmq, [easy idea]	6	Sol	[102]	p3	1	4
COCI 13-parovi	dp, dp_digit or math, prefix	6	Sol	[114]	p3	1	6
JOIOC 14-factories	graph, centroid-decomposition, lca, [micro optimizations], [easy idea]	6	Sol	[123]	p3		7
MCO 16-acorn	dp, dp_convex_hull or ad-hoc, binary search, [!dp]	6	Sol	[124]	p3		4
JOIOC 18-bubblesort2	segment tree or treap, observation, greedy, **impl**, [easy idea]	6	Sol	[13]	p3	3	9
IOI 05-mountains	segment tree, implicit, offline processing, [constant optimizations]	6	Sol	[13]	p3		8
infoarena fibo4 [40]	segment tree, math or math, fibonacci perid	6	Sol	[13]	p3		5
infoarena plimbare3 [41]	dp, dp_trees, [strict tl, mem], [easy idea]	6	Sol	[136]	p3		5
COCI 08-Najkraci	dp, dp_trees, mst or dijsktra	6	Sol	[136]	p3		4
infoarena sabin [42]	string processing, map or trie	6	Sol	[137]	p3		9

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
USACO 17feb-friendcross-plat	bit, 3d	6	Sol	[15]	p3		4
infoarena pitici3 [43]	dp, sorting, exchange argument	6	Sol	[16]	p3		6
Baltic 05-Bus_Trip [44]	dp, graph, datastructures, impl or greedy, [easy idea]	6	Sol	[16]	p3	1	5
infoarena lcdr	dp, datastructures, impl. [strict tl]	6	Sol	[16]	p3		5
USACO 20jan-threesum-gold	dp	6		[16]	p3		3
COI 19-ljepotica	dp [put link when available]	6	Sol	[16]	p3		1
CEOI 18-Cloud	dp, dp_table, knapsack	6	Sol	[23]	p3		8
IOI 17-mountains	dp, dp_ranges, cross product	6	Sol	[31]	p3	2	7
COCI 09-Ograda	greedy, constructive, stl, careful impl or monotonic queue	6	Sol	[32]	p3	1	8
infoarena kdtree	greedy, trees	6	Sol	[32]	p3	1	3
IOI 06-pyramid	datastructures, monotonic queue	6	Sol	[4]	p3	1	8
CEOI 09-Logs	datastructures, sorting	6	Sol	[4]	p3		6
infoarena eq	datastructures, greedy, d&c, impl	6	Sol	[4]	p3		5
APIO 12-Dispatching	graph, trees, datastructures, dsu-on-trees, [https://tioj.ck.tp.edu.tw/problems/1429]	6	Sol	[46]	p3		13
Baltic 11-Vikings	graph, bfs, [easy impl - big order]	6	Sol	[48]	p3		4
POI 07-Tourist	graph, dijkstra, dp, **tricky impl**, [easy idea]	6	Sol	[52]	p3	1	4
infoarena mexc	graph, dsu, matrix	6	Sol	[53]	p3		3
infoarena karb [45]	graph, mst, constructive, [matroid]	6	Sol	[60]	p3		7
CEOI 11-Traffic [46]	graph, scc, planer graph, impl [english txt http://ceoi.inf.elte.hu/probarch/11/trazad.pdf	6	Sol	[61]	p3		5
TOKIOpen 18-TileCovering	graph, lca, binary lifting, impl	6	Sol	[65]	p3	2	9
USACO 19feb-plat_cowdate	math, two pointers	6		[68]	p3		5
POI 07-Weights	math, log, prop	6	sol	[68]	p3		1
NOI 17-rmq	greedy, sweep	6	Sol	[32]	p2 v2	1	6
POI 14-FarmCraft	graph, greedy, exhange arguments or dp_trees	6	Sol	[46]	p2 v2		8
CEOI 08-Dominance	ad-hoc, Manhattan2DRotation, sliding window, **impl** or sweep, [easy idea]	6	Sol	[1]	p2	1	5
OSN 15-1C	ad-hoc, d&c, interactive	6	Sol	[1]	p2		2
IOI 11-race	graph, dsu-on-trees or centroid-decomposition, [standard], [http://www.ioi2011.or.th/hs	6	Sol	[125]	p2		15
infoarena arbore [47]	sqrt decomposition, trees, bitmasks	6	Sol	[126]	p2		2
CEOI 18-Global	segment tree, grid compress or bit, dp or dp, impl [lis prefix and postfix], [https://oj.uz/	6	Sol	[13]	p2		12
ROJS 17-cntgigelmat	segment tree or bit or datastructures, [strict time/memory]	6	Sol	[13]	p2		3
COCI 06-Ispiti	segment tree, grid compress	6	Sol	[13]	p2		2
infoarena minuni	segment tree	6	Sol	[13]	p2		1
Balkan 17-CityAttractions	dp, dp_trees or segment tree dp, centroid-decomposition	6	Sol	[136]	p2		11
COCI 06-Debug	string processing, hashing, masks, [solve COCI 06-Dvaput first]	6	Sol	[137]	p2		4
IOI 15-boxes	dp, greedy	6	Sol	[16]	p2	1	13
COCI 14-bob	dp, histogram, monotonic deque or datastructures	6	Sol	[16]	p2		5

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
infoarena retea3 [48]	dp, math	6	Sol	[16]	p2		4
COCI 15-savez	dp, hashing	6	Sol	[16]	p2		2
CEOI 06-Queue	bf, graph, stl, bst	6	Sol	[2]	p2		4
USACO 11nov-bsudoku-gold	dp, dp_bitmasks	6		[24]	p2		3
APIO 08-DNA	dp, dp_counting, dp_build_output	6	Sol	[26]	p2	1	9
Baltic 12-mobile	greedy, binary search, stack, circles	6	Sol	[32]	p2	1	10
POI 07-Flood	greedy, graph	6	Sol	[32]	p2		2
IOIPractice 19-packing	greedy, bf, [strict TL - optimizations], [output-only]	6	Sol	[32]	p2		2
CEOI 11-Balloons	geometry, circles, binary search or formula	6	#ERROR!	[38]	p2	1	2
USACO 17dec-greedy-plat	datastructures, set or segment tree	6		[4]	p2		2
USACO 18feb-slingshot-plat	geometry, sweep line, bit or segment tree	6		[44]	p2		2
Balkan 16-Conference	graph, ad-hoc. [reverse input]	6	Sol	[46]	p2		6
POI 17-Sports	graph, halls marriage theorem,observation, day 0	6	Sol (no edit	[46]	p2		1
infoarena matrice2 [49]	graph, dsu, sorting, **impl, [cases]**, [easy idea]	6	Sol	[53]	p2		4
infoarena nrsubsecv	graph, dsu or stack	6	Sol	[53]	p2		1
Baltic 09-Triangulate	graph, lca	6	Sol	[65]	p2		4
infoarena matrice [50]	math, impl, greedy	6	Sol	[68]	p2		1
IOIPractice 16-farey_sequence	binary search, meta binary search, math, fractions	6		[9]	p2		2
USACO 17mar-art	ad-hoc, prefix sum	6		[1]	p1		2
Baltic 17-Cat	graph, centroid-decomposition, greedy or segment tree, Maximum Independent Set o	6	Sol	[123]	p1	1	6
USACO 19dec-plat-snowcow	segment tree, dfs, data structures	6		[13]	p1		4
COCI 09-Kaboom	dp	6	Sol	[16]	p1		2
CEOI 06-Link	dp	6	Editorial	[16]	p?	1	2
USACO 15feb-censor	ad-hoc, hashing, [no string algo in IOI]	6	Sol	[1]		1	4
infoarena identice	ad-hoc, greedy, [Romanian txt]	6	Sol	[1]			1
IOI 03-guess	ad-hoc, optimizations	6	Sol	[1]		1	1
USACO 20feb-triangles	ad-hoc, prefix sum	6		[1]			1
NOIMOCK 15-chessboard	ad-hoc, [communication]	6		[1]			
IOI 12-scrivener	string processing, trie or binary lifting or lca or segment tree, persistent	6	Sol	[101]			13
CEOI 11-Matching [51]	string processing, kmp	6	Editorial	[102]		1	1
Dmoj stnbd4	mo's algorithm, bit, [count inversion]	6	Sol	[107]			2
DMOPC 16-MollyMangaShopping	mo's algorithm	6		[107]			1
COCI 08-Matrica	impl	6	Sol	[109]			2
IZhO 18-chessboard	impl, math	6		[109]			2
JOISC 17-broken_device	impl, cases, boring, [communication style] - https://oj.uz/submission/67071, [See JOIS	6	Sol	[109]			1
EOI 18-d1-A	dp, dp_d&c_opt, binary search	6		[112]		1	2

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
MCO 16-town_planning	graph, centroid-decomposition	6	Sol	[123]			1
Balkan 12-balls	dp, dp_convex_hull, binary search	6	Sol	[124]			1
CEOI 04-Two	dp, dp_convex_hull, tree, [k-median problem]	6	Sol	[124]			1
infoarena padurari	dp, dp_alien	6	Sol	[127]			1
Baltic 11-Trees [52]	segment tree, [=CSA41 candles]	6		[13]			2
POI 13-kon	segment tree, lazy or sqrt decomposition	6	Sol	[13]			1
POI 14-Rally	segment tree, topological sort	6		[13]			1
IOI 12-tournament	dp, dp_trees or segment tree	6	Sol	[136]		1	6
USACO 12dec-runaway	dp, dp_trees or lca, prefix sum	6	Sol	[136]			5
infoarena arb2	dp, dp_trees, [Romanian txt]	6	Sol	[136]			2
IOI 09-raisins	dp, prefix sum	6	Editorial	[16]		1	6
IZhO 17-bootfall	dp, knapsack	6	Sol	[16]			6
CEOI 05-Service	dp, **impl**	6	Editorial	[16]			2
infoarena pitici	dp, topological sort, DAG, [assign for romanians only]]	6		[16]		1	2
JOISC 19-lamps	dp	6		[16]			2
infoarena v2d	dp, [strict time], [assign for romanians only]]	6	Sol	[16]			1
COCI 18-sajam	todo, [weak cases]	6		[222]			1
JOIOC 15-electionCampaign	todo, is hld ?	6		[222]			1
COCI 14-Janje	todo	6		[222]			
JOISC 14-Bottle	todo, [**JAPANESE**]	6		[222]			
JOISC 14-Ramen	todo, [**JAPANESE**]	6		[222]			
JOISC 14-Stamps	todo, [**JAPANESE**]	6		[222]			
JOISC 15-Building3	todo, [**JAPANESE**]	6		[222]			
JOISC 15-CardGame	todo, [**JAPANESE**]	6		[222]			
JOISC 15-Vegetable2	todo, [**JAPANESE**]	6		[222]			
JOISC 16-Employment	todo, [**JAPANESE**]	6		[222]			
JOISC 16-Matryoshka	todo, [**JAPANESE**]	6		[222]			
JOISC 16-Reporter2	todo, [**JAPANESE**]	6		[222]			
JOISC 16-Telegraph	todo, [**JAPANESE**]	6		[222]			
POI 14-Freight	todo	6		[222]			
POI 06-Teddies	dp, dp_table, impl, [roll table for memory], boring]	6	Sol	[23]			1
IZhO 14-bank	dp, dp_bitmasks, precompute	6		[24]			6
POI 04-Passage	~~dp, dp_bitmasks, bf, [observe to opitimize], [same idea as COCI 16-vjestica]~~	~~6~~	Sol	[24]			~~5~~
IOI 04-artemis	geometry. sweep line, dp, [weak test cases?]	6	Sol	[37]			2
CEOI 14-fangorn	geometry, [cases, editorial], [easy idea]	6	Sol	[37]			1
COCI 09-Patuljci	~~datastructures, d&c, randomization, [~=COCI 09-snowwhite], [subpart of CF840-D1-E~~	~~6~~	Editorial	[4]			~~3~~

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
Infoarena Struti	datastructures, [Romanian txt]	6	Sol	[4]			1
TOKIOpen 17-Radius	datastructures	6	Sol	[4]			1
COCI 07-Poklon	datastructures	6	Editorial	[4]			1
infoarena copaci	geometry, polygon, pick's theorem	6	Sol	[43]			1
COCI 14-Mafija	graph, cycles, greedy, [max independent set in pseudoforest]	6	Sol	[46]		2	4
JOISC 13-Presents	graph, cycles, scc, [**JAPANESE**]	6		[46]			
Baltic 05-Maze	graph, bfs, [Input Processing is boring]	6	Editorial	[48]			1
CEOI 18-Toy	graph, dfs, [random optimizations]	6	Sol	[50]			5
COCI 17-usmjeri	graph, dfs, coloring	6	Editorial	[50]		1	4
Baltic 18-LovePolygon	graph, dfs, greedy or dp_trees	6	Sol	[50]		1	3
Infoarena Treesearch	graph, dfs, [Romanian txt]	6	Sol	[50]			1
Baltic 14-portals	graph, dijkstra, impl	6	Sol	[52]			2
JOISC 13-BusTour	graph, dijkstra, impl, [**JAPANESE**]	6		[52]			
COCI 14-Suma	graph, dsu, math, impl	6	Sol	[53]			1
USACO 11nov-steeple-gold	graph, max-flow, bipartite match, [direct]	6		[58]			1
IOI 03-maintain	graph, mst	6	Sol	[60]			4
USACO 11dec-simplify-gold	graph, mst, [basic]	6		[60]			1
POI 12-Festival	graph, scc	6	Editorial	[61]			1
CEOI 15-pipes	graph, scc, dsu or lca, dsu, [LONG code in notes, https://dunjudge.me/analysis/proble	6	#ERROR!	[61]			1
POI 01-SPO	graph, scc, 2-sat	6	Sol	[62]			1
Baltic 08-Gates	graph, scc, 2-sat, [direct]	6	Sol	[62]			1
COCI 20-zapina	math, dp, todo link	6	Sol	[68]			1
infoarena penal	math, [Romanian txt]	6	Sol	[68]			1
NOI 12-modsum	math, [https://www.comp.nus.edu.sg/~noi/2012/2012_soln.pdf]	6	Sol	[68]			1
CEOI 07-Nasty	math, infix to postfix, expression parsing	6		[78]			
infoarena porcjoc	math, inclusion-exclusion, math	6	Sol	[86]			1
IOI 11-ricehub	binary search, math, **median**, greedy	6	Sol	[9]		1	10
IZhO 13-burrow	binary search, then SPOJ HISTOGRA, [=APIOPractice 14-minsub, SPOJ MINSUB]	6	Sol	[9]		1	4
APIO 08-Beads [53]	binary search, persistence	6	Sol - Do loc	[9]			3
infoarena minim2	binary search, math, [classical]	6	Sol	[9]			1
MCOCAMP 16-flipbits	math, probability, ad-hoc	6	Sol (no edit	[91]			
MCO 17-ScientificResearch	math, mod inv or fft	6	Editorial	[96]			1
COCI 09-Zuma	dp, dp_ranges	5.75	Sol	[31]	p4	1	6
POI 08-BBB	greedy, datastrucrures, prefix, suffix	5.75	Sol	[32]	p4		3
POI 10-Teleport	graph, bfs	5.75	Editorial	[48]	p4		2
IOI 16-paint	dp, backtracking	5.75	Sol	[16]	p3 v2	1	12

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
Balkan 18-zalmoxis	greedy, tree, constructive, observation	5.75	Sol	[32]	p3 v2	3	8
IOI 08-linear	dp, dp_build_output, lexi, graph or combinatorics, [IOI08_linear_garden]	5.75	Sol	[111]	p3	1	10
CEOI 17-Building	dp, dp_convex_hull, Lichao segment tree or ad-hoc, binary partition	5.75	Sol	[124]	p3		12
USACO 17jan-subrev-plat	dp	5.75		[16]	p3		13
COCI 17-kas [54]	dp, state compression, [repeated], [rephrasing You need to select some elements and	5.75	Sol	[16]	p3		8
CSES 1112	dp, prefix sum, [https://gist.github.com/luciocf/5f35f24f4c7e510fb95e09aba9eacad2]	5.75	Sol	[16]	p3		5
COCI 08-Slikar	dp, d&c, dp_build_output, [optimize memory], [easy idea]	5.75	Sol	[16]	p3	1	4
IOIPractice 14-skwishinese-ioi14	dp, strings, some const optimizations	5.75	Sol	[16]	p3		4
infoarena scara2 [55]	dp, bitmasks	5.75	Sol	[16]	p3	1	2
IOI 19-shoes	greedy, impl or bit	5.75	Official sols	[32]	p3		4
infoarena regat [56]	datastructures, trees, dfs, optimizations, [repeated idea]	5.75	Sol	[4]	p3		5
IOI 13-dreaming	graph, bfs, tree diameter, [tree centroid], [easier version CF1092-D3-E], [also https://v	5.75	Sol	[49]	p3		12
COI 07-Tamnica	graph, dijkstra, compression, math	5.75	Sol	[52]	p3		4
IOIPractice 16-hallway	graph, dijkstra, binary search, circles	5.75		[52]	p3	2	3
JOI 17-joioi	binary search, greedy	5.75	Sol	[9]	p3		2
COCI 16-cezar [57]	graph, dfs, topological sort, [official cases are weak (used on oz.uz). Please AC on dr	5.75	Sol	[119]	p2	2	8
Baltic 07-Escape	graph, max-flow, min-cut, vertex split, basic circles, [newcomers]	5.75	Sol	[120]	p2		1
USACO 17feb-nocross-plat	dp, segment tree	5.75		[16]	p2		5
infoarena secvbest [58]	dp, deques, implementation	5.75	Sol	[16]	p2	1	2
COCI 14-Neo	dp, dp_subrectangle, 2d, observations	5.75	Editorial	[20]	p2	1	5
USACO 18dec-dining	graph, dijkstra	5.75		[52]	p2		3
POI 10-Pilots	two pointers, sliding window or rmq	5.75	Sol	[110]	p1		3
CEOI 03-Hanoi [59]	ad-hoc, hanoi	5.75	Sol	[1]			2
RusOI-reg 15-search	string processing, trie, impl, bf, [russian]	5.75		[101]			1
NOI 11-tutor	dp, impl, [standard]	5.75	Editorial	[16]		1	2
IOIQ 18-r2-B	dp, dp_counting or greedy	5.75	Sol	[26]			2
POI 04-Strings	graph, impl	5.75	Editorial	[46]			1
NOI 16-fabric	math ?	5.75	Editorial	[68]		1	2
POI 09-Fire	graph, dfs or dp	5.5	Sol	[50]	p4		1
CEOI 03-Therace [60]	math, simulation	5.5	Sol	[68]	p4	1	2
POI 15-Trous	binary search, sliding window, [stack trick/convex hull optimization]	5.5	Sol	[9]	p4	1	7
IOI 16-dna	binary search, impl	5.5	Sol	[9]	p4		5
Balkan 17-Monsters	datastructures, greedy, stack, cumulative sum	5.5	Sol	[4]	p3 v2	1	8
ROJS 17-ultimateorbs	datastructures, monotonic stack, greedy or d&c	5.5	Sol	[4]	p3 v2		4
IOI 18-combo	ad-hoc, [Cool restore X with queries problem.]	5.5	Sol	[1]	p3	1	12
JOIOC 18-Xylophone	ad-hoc, interactive	5.5	Sol	[1]	p3		9

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
infoarena interact	ad-hoc, interactive, [harder version infoarena password2]	5.5	Sol	[1]	p3		4
JOISC 18-library	ad-hoc, interactive, binary search, [todo review submission link]	5.5	Sol	[1]	p3	1	3
POI 10-Game	ad-hoc, sorting	5.5	Editorial	[1]	p3		2
COCI 19-parametriziran	ad-hoc, bitmasks	5.5	Sol	[1]	p3		1
CCO 18-GradientDescent	ternary search, impl or binary search, interactive	5.5	Sol	[10]	p3		12
CEOI 15-bobek	meet in middle, bf	5.5	AC	[11]	p3		8
COCI 17-san	meet in middle	5.5	Editorial	[11]	p3		6
IOIQ 18-onsite-C	two pointers, median	5.5	Sol	[110]	p3		2
POI 10-Blocks	two pointers, prefix sum	5.5	Sol	[110]	p3		1
infoarena puncte [61]	dp, dp_convex_hull or LiChao	5.5	Sol	[124]	p3		3
IZHO 14-divide	segment tree, lazy, dp	5.5	Sol	[13]	p3		7
NOI 17-very_best_pokemon	segment tree or bit, dfs or merge-sort tree with updates, binary-lifting, dfs	5.5	Sol	[13]	p3		1
infoarena sir3 [62]	segment tree	5.5	Sol	[13]	p3		1
USACO 15jan-gold_movie	dp, dp_sos	5.5		[134]	p3		3
CSES 1654	dp, dp_sos	5.5	Sol	[134]	p3		2
Baltic 19-kitchen	dp	5.5	Editorial	[16]	p3		3
COCI 17-vode	dp, periodic output	5.5	Sol	[16]	p3		3
USACO 16mar-262144-plat	dp or greedy	5.5		[16]	p3		3
POI 16-Johny	dp, bit. permutations or math, recurrance, swaps, [also https://www.youtube.com/wat	5.5	Sol	[16]	p3		2
POI 13-Bytecom	dp	5.5	Sol	[16]	p3		2
infoarena amenzi	dp, graph, [strict time]	5.5	Sol	[16]	p3		1
infoarena peri	dp, [has a cute O(n^3) solution using a dp approach similar to the max sum subarray]	5.5	Sol	[16]	p3		1
COCI 17-automobil	dp or math	5.5	Sol	[16]	p3		1
CSA circuits	dp, dp_bitmasks, dp_counting	5.5	Sol	[24]	p3		2
COI 19-segway	simulation	5.5	Sol	[3]	p3		2
POI 96-wie	greedy, sorting	5.5	Sol	[32]	p3		5
Balkan 11-Medians	greedy, binary Search	5.5	Sol	[32]	p3		3
CEOI 11-Hotel	greedy	5.5	Sol	[32]	p3		3
COI 06-Patrik	datastructures, stack or monotonic queue or bit, [easy if repeated idea]	5.5	Sol	[4]	p3		14
infoarena permsort [63]	datastructures	5.5	Sol	[4]	p3		3
CEOI 06-Antenna	geometry, sweep line, radial sweep, binary search	5.5	Sol	[44]	p3		2
POI 05-Double_Row	graph, greedy, [implicit]	5.5	Sol	[46]	p3		6
USACO 13jan-island	graph, floyd, traveling sales man	5.5		[55]	p3	1	1
COCI 07-Kemija	math, ad-hoc	5.5	Sol	[68]	p3		3
COCI 07-Granica	math, gcd, ad-hoc	5.5	Sol	[73]	p3		3
Baltic 08-Grid	binary search, combinatorics, impl or dp	5.5	Sol	[9]	p3	1	6

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
POI 14-Couriers	binary searchm randomization	5.5	Sol	[9]	p3		1
IOI 08-printer	string processing, trie or greedy, sorting	5.5	Sol	[101]	p2		9
Baltic 14-friends	string processing, rolling hash, bf	5.5	Sol	[105]	p2	1	7
POI 96-kod	bst	5.5	Sol	[108]	p2		1
IOI 16-molecules	two pointers, greedy	5.5	Editorial	[110]	p2		13
EOI_IOI 18-QR-C	two pointers	5.5	Sol	[110]	p2		1
CEOI 03-Trip [64]	dp, dp_build_output, lcs	5.5	Editorial	[111]	p2		1
Baltic 13-numbers	dp, dp_digit, impl, [~=ROI-regional 16-numbers]	5.5	Sol	[114]	p2		5
COCI 08-Tresnja	dp, dp_digit	5.5	Sol	[114]	p2		1
COCI 07-Cudak	dp, dp_digit	5.5	Editorial	[114]	p2		1
USACO 19jan-redistricting_plat	segment tree, dp	5.5		[13]	p2		6
COCI 17-poklon	segment tree or bit or dfs, [count unique]	5.5	Editorial	[13]	p2		4
Baltic 06-Countries	dp, dag, model graph	5.5	Sol	[16]	p2		2
JOI 15-Cake2 [65]	dp, [JAPANESE], [From google translated statement you may think that the first playe	5.5	Sol	[16]	p2		2
Baltic 11-Meetings	dp, divisors, [Standard trick of changing dimension for dp], []	5.5	Sol	[16]	p2		1
COI 18-paprike	greedy, graph	5.5		[32]	p2		5
IOI 04-farmer	greedy or dp	5.5	Sol	[32]	p2		4
CEOI 04-Trips	greedy, two pointers	5.5	Sol	[32]	p2		3
POI 13-Takeout	greedy, [POI13_usu]	5.5	Sol	[32]	p2		3
USACO 15dec-cardgame-plat	greedy or segment tree	5.5		[32]	p2		3
Infoarena aranjare [66]	greedy, data structures	5.5	Sol	[32]	p2	1	2
POI 11-Sticks	greedy, geometry basics, POI11_pat	5.5	Sol	[32]	p2		2
JOISC 17-sparklers	greedy, binary search, [See JOISC-17-abduction2.txt]	5.5	Sol	[32]	p2		1
CCO 15-Hungry_Fox	greedy	5.5		[32]	p2		1
JOISC 19-Examination	datastructures, [Straightforward 2D range sum queries with point updates problem]	5.5	ACE	[4]	p2		2
EJOI 17-magic	datastructures, impl	5.5	Sol	[4]	p2		1
USACO 16-usopen-split-gold	geometry, sweep line	5.5		[44]	p2		1
infoarena color5	graph, constructive	5.5		[46]	p2		1
COCI 17-portal	graph, dijkstra, implicit graph, impl	5.5	Sol	[52]	p2		3
NOI 19-pilot	graph, dsu, stack combi	5.5	AC	[53]	p2		4
COCI 18-priglavci	graph, max-flow, bipartite match, binary search	5.5	Sol	[58]	p2		4
USACO 15jan-grass	graph, scc	5.5	Sol	[61]	p2		4
infoarena cifru [67]	math, combinatorics	5.5	Sol	[82]	p2		3
USACO 18dec-cowpatibility	math, inclusion-exclusion, hashing	5.5		[86]	p2		2
IOIPractice 14-questions-i-ask-myself-ioi	binary search, factrization, optimization	5.5	Sol	[9]	p2		3
Dmoj TortureChamber	math, sieve, segments	5.5		[93]	p2		1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
USACO 17feb-mincross-plat	ad-hoc	5.5		[1]	p1		2
Baltic 14-network	impl	5.5	Sol	[109]	p1		3
COCI 06-Dvaput	string processing, hashing, binary search, **impl**, [double hashing]	5.5	Sol	[137]	p1		2
IOIPractice 19-Transfer	ad-hoc, huffman coding, interactive, [~= IOIPractice 17-Coins]	5.5	Sol	[1]			4
POI 05-Bus	ad-hoc, sorting or segment tree, dp	5.5	Sol	[1]			1
JOISC 13-Mountain	ad-hoc, interactive?, [JAPANESE]	5.5		[1]			
Balkan 15-UltimateTTT	impl, bf, [problem in text cases?]	5.5		[109]		1	2
JOI 16-CollectingStamps2	impl, prefix sum, suffix sum, [**JAPANESE**]	5.5	AC	[109]			1
COCI 06-lista	impl, linked-list, ad-hoc	5.5	Sol	[109]			1
JOI 14-JOIEmblem	impl, [**JAPANESE**]	5.5		[109]			
JOI 17-semiexpress	impl	5.5		[109]			
infoarena drept2	two pointers, deques	5.5		[110]			1
COCI 19-deblo	graph, centroid-decomposition, bit, [=CF766-D2-E]	5.5	Sol	[123]			2
POI 11-rod [68]	graph, dsu-on-trees, [bigger constraints that POI 11-Rotation - POI11_rot]	5.5	Sol - see e	[125]			
JOISC 13-Collecting	segment tree, math, [**JAPANESE**]	5.5		[13]			
infoarena arbore7 [69]	dp, dp_trees	5.5	Sol	[136]			2
USACO 12nov-btree-gold	dp, dp_trees	5.5		[136]			1
USACO 17jan-promote-plat	bit, dfs	5.5		[15]			2
USACO 11nov-median-gold	bit	5.5		[15]			1
Baltic 13-ballmachine	dp, trees or lca	5.5	Sol	[16]			4
IOI 02-Frog	dp, [time memory] or graph, ad-hoc	5.5	Sol	[16]		1	3
USACO 13open-photo	dp	5.5		[16]		1	3
COI 15-kovanice	dp, dsu, [basic]	5.5	Sol	[16]			2
BalticPractice 18-Citations	dp, sorting, greedy	5.5	Sol	[16]			2
infoarena asmin	dp, trees	5.5	Sol	[16]			1
infoarena nkbiti	dp, matrix pow, [classical]	5.5	Sol	[16]			1
infoarena profit	dp, [Romanian txt]	5.5	Sol	[16]			1
infoarena zip	dp, hashing, strings	5.5	Sol	[16]			1
infoarena zmeu	dp, bfs, [Romanian txt]	5.5	Sol	[16]			1
IOIPractice 16-lights-out	dp	5.5		[16]			1
JOISC 13-Mascots	dp, mod inv, factorial, [**JAPANESE**]	5.5		[16]			
POI 10-Frog	todo	5.5	Editorial	[222]			2
Dmoj MostlyTalking	todo	5.5		[222]			1
DMOPC 14-SaveNagato	todo	5.5		[222]			1
DMPG 16-MMORPGII	todo	5.5		[222]			1
UTSOpen 18-ABCs	todo, boring	5.5		[222]			1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
UTSOpen 18-LoveTriangle	todo, boring	5.5		[222]			1
POI 14-Salad	todo	5.5	Editorial	[222]			
JOISC 14-Friends	todo, [**JAPANESE**]	5.5		[222]			
JOISC 15-Copypaste2	todo, [**JAPANESE**]	5.5		[222]			
JOISC 15-Road	todo, [**JAPANESE**]	5.5		[222]			
MCO 16-cropharvesting	todo	5.5		[222]			
COCI 08-Lubenica	dp, dp_bitmasks	5.5	Sol	[24]			2
COCI 06-V	dp, dp_counting	5.5	Editorial	[26]			2
IZhO 17-money	greedy	5.5	Sol	[32]		1	8
APIOPractice 14-mcamp	greedy or bit	5.5	Sol	[32]			2
POI 15-Seals	greedy, impl	5.5	Sol	[32]			2
TOKIOpen 17-Magic	greedy, matching	5.5	Sol	[32]			1
COCI 16-kvalitetni	greedy, math, [hard txt?]	5.5	Editorial	[32]			1
IOI 05-game [70]	game theory, interactive, [use cout/cin not printf/scanf]	5.5	Sol	[33]			2
infoarena cuiburi	geometry, dp, [Romanian txt]	5.5	Sol	[37]			1
USACO 14dec-marathon	datastructures, [normal idea, heavy DS, e.g. segment tree]	5.5	Sol	[4]			3
Info1Cup 19-Simple	datastructures, impl, [where OJ]	5.5	Sol	[4]			1
infoarena omizi	datastructures, dfs and similar, [Romanian txt]	5.5	Sol	[4]			1
IOI 00-car	graph, impl, [tediuos impl]	5.5	Editorial	[46]			2
Infoarena grea [71]	graph, bfs, datastructures	5.5	Sol	[48]			1
POI 06-Professor	graph, bfs, impl	5.5	Editorial	[48]			1
POI 14-Hotels	graph, bfs	5.5	Editorial	[48]			
JOI 16-TrainFare	graph, dfs, bfs, [**JAPANESE**]	5.5		[50]			
JOISC 13-Spy	graph, dfs, [**JAPANESE**]	5.5		[50]			
JOI 15-JOIPark	graph, dijkstra, [**JAPANESE**]	5.5		[52]			
NOI 14-sightseeing	graph, mst	5.5	Editorial	[60]			1
TOKIOpen 17-Beauty	graph, scc, biconnected components, block cut tree	5.5	Sol	[64]			1
USACO 15dec-maxflow-plat	graph, lca, [close to CF192-D2-E]	5.5		[65]			2
CEOI 17-mousetrap	binary search or search	5.5	Editorial	[9]		1	2
JOI 13-Tower	binary search, impl, [**JAPANESE**]	5.5		[9]			
JOI 14-Baumkuchen	binary search, [**JAPANESE**]	5.5		[9]			
IOI 16-tetris	ad-hoc, games	5.25	Sol	[1]	p3		3
COCI 07-Turbo	bit	5.25	Editorial	[15]	p3		2
COCI 09-Kraljevi	dp	5.25	Editorial	[16]	p3		3
IOI 04-phidias	dp	5.25	Editorial	[16]	p3		3
IOI 04-hermes	dp, observation	5.25	Editorial	[16]	p3		2

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
SNSS 18-R2-B	bf, strings, hashing, [russian txt]	5.25	#ERROR!	[2]	p3		1
COCI 07-Princeza	geometry, ad-hoc	5.25	Editorial	[37]	p3		1
COCI 06-Jogurt	graph, trees, math	5.25	Sol	[46]	p3		4
Baltic 11-Lamp	graph, bfs, 0-1 bfs or dijkstra	5.25	Sol	[48]	p3		3
COCI 06-Kamen	graph, dfs	5.25	Sol	[50]	p3	1	2
POI 08-Mafia	graph, dfs, cycles	5.25	Sol	[50]	p3		2
Datatähti Open19-D	math, combinatorics, impl, tree	5.25		[82]	p3		3
COCI 07-Barica	dp, sorting, sweep	5.25	Sol	[16]	p2		1
NOI 17-best_place	ad-hoc, math	5.25	Editorial	[1]			2
IOIQ 19-d2-C	dp, dag	5.25		[16]		1	3
COCI 12-jedan	dp, [https://ideone.com/GSEJmj]	5.25	Editorial	[16]		1	2
NOIMOCK 15-rooms	dp, graph	5.25		[16]			
IOI 01-Twofive	todo	5.25	Editorial	[222]			2
COCI 08-Svada	binary search	5.25	Editorial	[9]			1
COCI 08-BST	graph, trees, datastructures	5.1	Sol	[46]	p3		2
POI 10-Railway	graph, impl	5	Editorial	[46]	p4		1
COCI 17-poklon7-r7	graph, dfs, math	5	Editorial	[50]	p4		1
IOI 10-quality	ad-hoc, prefix sums, binary search	5	Sol	[1]	p3 v2		10
Baltic 15-net	greedy, dfs or dp, [cover the tree with minimum number of paths from one node to an	5	Sol	[32]	p3 v2	2	17
IOI 13-cave	binary search, interactive, d&c, [also sol at http://blog.brucemerry.org.za/2013/07]	5	Sol	[9]	p3 v2		13
POI 12-Warehouse	greedy, datastructures, binary search, [greedy with undo]	5	Sol	[32]	p3 v1		5
USACO 11dec-photo-gold	ad-hoc, merge sort	5		[1]	p3	2	5
COCI 13-Kusac	ad-hoc	5	Editorial	[1]	p3	2	4
CEOI 05-keys	ad-hoc	5	Sol	[1]	p3		2
infoarena bitcost [72]	ad-hoc, d&c	5	Sol	[1]	p3		1
COCI 15-topovi	impl, observation	5	Sol	[109]	p3		5
Baltic 18-MartianDNA	two pointers, impl	5	Sol	[110]	p3	1	7
EJOI 17-game	two pointers	5	Sol	[110]	p3	1	4
Baltic 10-Bins	two pointers, bf, ad-hoc	5	Sol	[110]	p3		2
JOI 17-foehnPhenomena	segment tree or bit	5	Sol	[13]	p3		5
Datatähti Open19-C	bit, datastructures, offline	5		[15]	p3		1
Baltic 10-PCB	dp, lis, nlogn, [np-hard-special-case-reduce]	5	Sol	[16]	p3		2
COCI 13-domine	dp, [https://ideone.com/LO0Jfr]	5	Editorial	[16]	p3	1	2
COCI 14-Sabor	bf, ad-hoc, [complexity analysis]	5	Sol	[2]	p3		4
CCO 08-Candy	todo	5		[222]	p3		1
DMOPC 17-IntersectingArcs	todo	5		[222]	p3		1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
DMOPC 17-IntimidatingArrays	todo	5		[222]	p3		1
IZhO 12-beauty	dp, dp_bitmasks	5	Sol	[24]	p3		5
COCI 19-maja	dp, dp_counting	5	Sol	[26]	p3		2
CEOI 11-Similarity	dp, dp_counting or fft	5	Sol	[26]	p3		1
COCI 18-cover	dp, dp_ranges	5	Sol	[31]	p3	1	6
APIO 08-Roads	greedy, mst, [badly integrated checker, http://apio-olympiad.org/2008/], [english txt: ht	5	Sol	[32]	p3		5
infoarena borcane [73]	greedy, constructive, pattern	5	Sol	[32]	p3	1	2
COCI 07-Avogadro	greedy	5	Editorial	[32]	p3		1
infoarena metrouri [74]	greedy, implementation	5	Sol	[32]	p3		1
COCI 17-doktor	geometry, circles, ad-hoc, prefix sum	5	Editorial	[38]	p3		3
POI 07-Megalopolis	graph, tree, traversal	5	Sol	[46]	p3		1
COCI 17-ronald	graph, dfs, ad-hoc	5	Editorial	[50]	p3	1	5
COCI 09-Vuk	graph, dijkstra, bfs	5	Editorial	[52]	p3		2
IOIPractice 14-world-peace-ioi14	graph, dsu or hld or 2D-range tree or k-d tree	5	Sol	[53]	p3		2
CCO 07-RoadConstruction	graph, dsu, bridges	5	Sol	[53]	p3		2
Dmoj Inaho	graph, dsu, rollback-dsu	5		[53]	p3		2
TOKIOpen 18-CellsTour	graph, max-flow, bipartite match, [https://ideone.com/SU69ra]	5	Sol	[58]	p3		2
POI 16-Hedge	graph, mst, 2D grid, [also https://www.youtube.com/watch?v=8CTteoBqW6A]	5	Sol	[60]	p3		1
COCI 14-Stogovi	graph, lca, persistent stack	5	Sol	[65]	p3		3
UTSOpen 15-DistributionChannel	graph, lca, mst	5	Sol	[65]	p3		2
COCI 13-cokolade	math, number theory, precomputation	5	Sol	[68]	p3	1	3
CEOI 14-carnival	binary search, math, interactive, d&c, [editorial]	5	Sol	[9]	p3		11
COI 07-Glasnici	binary search	5	Editorial	[9]	p3		2
IOI 07-aliens	binary search, interactive, observation, impl	5	Editorial	[9]	p2 v2	1	6
NOI 13-gw	ad-hoc, [OJ.UZ grading server where memory isn't freed between test cases, and it to	5	Sol	[1]	p2		4
COCI 15-Slon	ad-hoc, expressions, postfix, infix, queue	5	Editorial	[1]	p2		2
COCI 09-Mali	ad-hoc	5	Editorial	[1]	p2		1
COCI 14-Jabuke	ad-hoc, preprocessing or bfs	5	Editorial	[1]	p2		1
USACO 19feb-gold-paintbarn	ad-hoc, prefix sum	5		[1]	p2		1
NOI 14-orchard	impl, [https://github.com/ZeyadKhattab/Competitive-Programming/blob/master/Proble	5	Editorial	[109]	p2		1
USACO 19feb-cowdate-plat	two pointers, math	5		[110]	p2		1
Infoarena vmin [75]	dp, dp_convex_hull or LiChao, [actually not dp case]	5	Sol	[124]	p2		2
POI 11-Rotation	graph, dsu-on-trees or segment tree, [classical, good for practice], POI11_rot	5	Editorial	[125]	p2		1
Dmoj HopScotch	sqrt decomposition or dp or link-cut tree	5		[126]	p2		3
COCI 17-deda	segment tree or bit	5	Sol	[13]	p2		7
JOIOC 15-sterilizing	segment tree	5	Sol	[13]	p2		4

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
POI 17-Strikes	segment tree, bfs, bfs order	5	Sol (no edit	[13]	p2		2
COCI 17-krov	bit, grid compress	5		[15]	p2		2
COCI 06-Tenkici	bit, graph or datastructures	5	Sol	[15]	p2		1
COCI 07-Jednakost	dp	5	Sol	[16]	p2		2
COCI 07-Zapis	dp	5	Editorial	[16]	p2		2
USACO 16dec-team-plat	dp	5		[16]	p2		2
COCI 18-go	dp	5	Sol	[16]	p2		1
CCC 16-Combining_Riceballs	dp	5		[16]	p2		1
CCC 18-Balanced_Trees	dp	5		[16]	p2		1
IOI 00-Post	dp, dp_ranges	5	Editorial. G	[31]	p2		2
USACO 14dec-cowjog	greedy	5		[32]	p2		4
infoarena cuplaje	greedy, sorting	5		[32]	p2		1
IOIPractice 14-bounce-bounce-bounce-ic	geometry, circles, gcd	5	Sol	[38]	p2		3
COCI 06-Circle	geometry, circles, simulation	5	Sol	[38]	p2		1
NOI 17-roadside_adverts	graph. lca, mst, [https://github.com/samyravitoria/olympics-problems/blob/master/NOI	5	Editorial	[46]	p2		1
COI 16-dijament	graph, ad-hoc, map	5	Editorial	[46]	p2		1
NOI 17-hotspot	graph, dijkstra, [https://github.com/sofhiasouza/CompetitiveProgramming/blob/master	5	Editorial	[52]	p2		1
COCI 16-prosjecni	math, bf	5	Editorial	[68]	p2	2	3
COCI 15-Chewbacca	math	5		[68]	p2	1	2
Dmoj FibonacciSequenceHarder	math, bf	5		[68]	p2		2
SNSS 18-R1-A	math, memoization	5	Sol	[68]	p2		1
OSN 15-2C	binary search	5	Sol	[9]	p2		1
Dmoj EllisFahrengart	sqrt decomposition, optimizations	5	Sol	[126]	p1		4
IOI 00-walls	graph, floyd, polygon, [https://blog.csdn.net/l04205613/article/details/6427378]	5	Sol	[55]	p1	1	2
CEOI 05-Net	graph, scc, biconnected components	5	Sol	[64]	p1		2
IOI 14-gondola	ad-hoc, combinatorics	5	Editorial	[1]			13
JOIOC 14-secret	ad-hoc, d&c, interactive	5	Sol	[1]		1	5
POI 10-Beads	ad-hoc, binary search or KMR or hasging	5	Sol	[1]			3
IOIPractice 14-color-grid-ioi14	ad-hoc, [constrains is not mentioned]	5	Sol	[1]			2
DMPG 15-BlackWhite	ad-hoc, prefix sum 2d	5		[1]			2
IOIPractice 14-christopher-candy-ioi14	ad-hoc, strings, prefix sums, combinatorics	5	Sol	[1]			1
infoarena covor	ad-hoc, [Romanian txt]	5	Sol	[1]			1
infoarena greutati	ad-hoc, greedy, [Romanian txt]	5	Sol	[1]			1
Baltic 05-Camp	ad-hoc, 2D prefix sum, impl	5	Editorial	[1]			1
POI 06-Periods	ad-hoc	5	Editorial	[1]			1
COCI 06-Ivana	ad-hoc	5	Editorial	[1]		1	1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
COCI 07-Muzicari	ad-hoc	5	Editorial	[1]			1
COCI 19-kocka	ad-hoc	5	Sol	[1]			1
CCC 16-Circle_Life	ad-hoc	5		[1]			1
USACO 19mar-walk-gold	ad-hoc	5		[1]			1
POI 12-Well	ad-hoc, impl	5	Editorial	[1]			
MCO 16-painting	ad-hoc	5	Editorial	[1]			
MCO 14-swaps	ad-hoc, cycles	5	Sol No Edit	[1]			
NOIMOCK 15-dynamite	ad-hoc, [output only]	5		[1]			
Baltic 11-grow	bbst, treap, implicit or segment tree or bit	5	Sol	[106]			1
JOISC 13-Spaceships	bbst, splay or link-cut trees, [**JAPANESE**]	5		[106]			
infoarena poarta2	impl, bignum	5	Sol	[109]			1
EOIQ 18-r2-C	impl	5		[109]			1
POI 09-Brigade	impl	5	Editorial	[109]			
POI 16-Water_Park	impl	5	Editorial	[109]			
IZhO 19-stones	impl	5		[109]			
JOISC 13-Poster	impl, [**JAPANESE**]	5		[109]			
JOI 19-ExhibitionBatch	two pointers, [JOI19_ho_t2]	5		[110]			5
USACO 13jan-lineup	two pointers	5	Sol	[110]			4
POI 13-Colorful	two pointers	5	Editorial	[110]			1
infoarena cifra4	dp, dp_digit, binary search	5	Sol	[114]			1
USACO 19feb-gold-cowland	graph, hld	5		[122]			1
DMPG 18-MimiDivision	sqrt decomposition	5		[126]			1
COCI 07-Redoks	segment tree, lazy propagation	5	Sol	[13]			3
IOIQ 19-r2-A	segment tree, monotone queue	5		[13]			2
COI 08-Cvjetici	segment tree or bit or sqrt decomposition	5	Sol	[13]			1
ROJS 17-remove_update	segment tree, prefix sum	5	Sol	[13]			1
CCO 13-Tourney	segment tree	5		[13]			1
DMOPC 18-HenriLabData	segment tree	5		[13]			1
USACO 15dec-haybales-plat	segment tree	5		[13]			1
COCI 12-KOSARE [76]	~~dp, dp_sos, [standard]~~	~~5~~	Editorial	[134]			~~1~~
infoarena posta2	dp, dp_trees	5	Sol	[136]			1
POI 16-Parade	dp, dp_trees, [also https://www.youtube.com/watch?v=PRmAUzgbOBI]	5	Sol	[136]			1
USACO 18feb-dirtraverse-gold	dp, dp_trees, [repeated]	5		[136]			1
MCO 15-secret	string processing or roll hashing	5	Sol No Edit	[137]			
IZhO 17-GAME	bit	5		[15]			2
USACO 11dec-grassplant-gold	bit or hld, [basic]	5		[15]			1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
IZhO 19-sortbooks	bit	5		[15]			
JOI 18-art	dp, [max sum 1d, trivial old problem]	5	Sol	[16]			12
Baltic 18-Paths	dp, dp_bitmaks, dp_trees	5	Sol	[16]		1	8
JOIOC 13-watching	dp, binary search	5	Sol	[16]			8
USACO 14dec-guard	dp or bfs, bitmasks, exchange arguments	5	Sol	[16]			6
IOI 10-traffic	dp, tree or segment tree	5	Sol	[16]			3
JOI 20-CollectingStamps3	dp, JOI20_ho_t3	5	Sol	[16]			2
COCI 06-Stol	dp	5	Editorial	[16]			2
NOI 10-landscape	dp	5		[16]			2
infoarena panza	dp, queue	5	Sol	[16]			1
Baltic 08-Elections	dp, greedy	5	Editorial	[16]			1
COCI 08-Setnja	dp, tree, bignum, memory compression	5	Editorial	[16]			1
NOI 07-street	dp	5	Editorial	[16]			1
NOI 08-housing	dp	5	Editorial	[16]			1
NOI 15-askonegetonefree	dp	5	Editorial	[16]			1
Dmoj City_Game	dp	5		[16]			1
info1cup 18-maxcomp	dp	5		[16]			1
USACO 19mar-snakes-gold	dp	5		[16]			1
Baltic 06-Jump	~~dp, **bignum**, standard~~	~~5~~	Editorial	[16]			
NOI 16-unlucky_floors	dp	5	Editorial	[16]			
POI 09-Inspector	dp	5	Editorial	[16]			
POI 11-Difference	dp, max sum, strings, [POI11_roz, POI XVIII-roz]	5	Editorial	[16]			
POI 13-luk	dp, math	5	Editorial	[16]			
POI 13-mor	dp	5	Editorial	[16]			
JOI 14-IOIManju	dp, [small code], [**JAPANESE**]	5		[16]			
NOIMOCK 15-battleship	dp	5		[16]			
infoarena cartite	bfs, euler cycles, implementation	5	Sol	[2]			1
COCI 08-Kruska	bf, cycle, pidgeon hole	5	Editorial	[2]			1
COCI 07-Lektira	bf	5	Editorial	[2]			1
COCI 20-nivelle	bf, [todo link]	5		[2]			1
COCI 08-Skakavac	todo	5	Editorial	[222]		1	1
COCI 09-Kletva	todo	5	Editorial	[222]			1
COCI 09-Bakice	todo	5	Editorial	[222]			1
COCI 14-Zgodan	todo	5	Editorial	[222]			1
NOI 16-pandaski	todo	5	Editorial	[222]			1
CCO 07-Cows	todo	5		[222]			1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
CEOI 02-NRook	todo, [not in actual contest]	5		[222]			1
COCI 09-Iks	todo	5		[222]			1
COCI 20-skandi	todo	5		[222]			1
COCI 20-trener	todo	5		[222]			1
COI 09-Hrastovi	todo	5	Editorial	[222]			
COI 08-Tablica	todo	5	Editorial	[222]			
POI 12-Vouchers	todo	5	Editorial	[222]			
MCO 15-bitcoin	todo	5	Sol No Edit	[222]			
JOISC 14-Bus	todo, [**JAPANESE**]	5		[222]			
JOISC 14-Straps	todo, [**JAPANESE**]	5		[222]			
JOISC 14-Vegetable	todo, [**JAPANESE**]	5		[222]			
JOISC 15-Logo	todo, [**JAPANESE**]	5		[222]			
CEOI 17-Palindromic	greedy, hashing	5		[32]		1	5
CEOI 17-sure	greedy or ternary search, [editoral]	5	Sol	[32]			4
APIO 07-MOBILE2	greedy or d&c	5	Sol	[32]			3
infoarena danger	greedy, constructive algorithm	5	Sol	[32]			1
Baltic 07-Sequence	greedy	5	Sol	[32]			1
COCI 17-hokej	greedy, matrix, [https://ideone.com/3V5rzT]	5	Editorial	[32]			1
Baltic 05-Magic	greedy, parentheses or dp	5	Sol	[32]			1
POI 05-ToyCars	greedy, [=IOI 12-Supper]	5	Editorial	[32]			1
POI 14-Bricks	greedy, sorting	5	Sl	[32]			1
ROUSelection 18-shampoo_exchange	greedy	5		[32]			
Baltic 09-Rectangle	geometry, rectangles	5	Sol	[37]			1
POI 08-Mirror	geometry	5	Editorial	[37]			1
IOI 03-boundary	geometry, angles, [close to soring in convex hull]	5	Editorial	[37]			
BalticWarmup 17-Toast	geometry, circles, [cosine rule]	5	Sol	[38]			4
DMOPC 15-LeleiandContest	datastructures, math	5		[4]			2
infoarena troll	datastructures, dp, [classical]	5	Sol	[4]			1
MCO 16-cablecar	datastructures, ad-hoc	5	Editorial	[4]			
CCC 15-Convex_Hull	graph	5		[46]			1
DMOPC 14-ExamDelay	graph	5		[46]			1
DMPG 15-ApplesOranges	graph	5		[46]			1
IOI 97-Mars	graph, sp	5	Editorial	[46]			
POI 12-Distance	graph	5	Editorial	[46]			
NOI 09-lazycat	graph, bfs, dp, [https://ideone.com/Aw2JQq]	5	Editorial	[48]			1
NOI 12-pancake	~~graph, bfs or dp, [avoid, Pancake sorting, hard to guess limit in contest without trial/er~~	~~5~~	Editorial	[48]			1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
EOI 19-d2-B	graph, bfs, grid compress	5		[48]			1
IOIQ 18-r1-A	backtrack, binary search	5	Sol	[5]			2
Baltic 13-tracks	graph, dfs, bfs, floodfill	5	Sol	[50]			7
POI 11-ins	graph, dfs, tree center, bfs or topological sort	5	Sol	[50]			1
MCO 16-penghulu	graph, dfs, tree, queries, [https://ideone.com/g7VF8C]	5	Editorial	[50]			1
NOI 12-forensic	graph, dfs, [No local submissions]	5	Editorial	[50]			
POI 16-Transmit	graph, dfs, impl	5	Editorial	[50]			
infoarena pesaptecarari	graph, dijkstra, primes	5	Sol	[52]			1
NOI 13-ferries	graph, dijkstra	5		[52]			1
POI 04-Competition	graph, dijkstra, cycle, impl	5	Editorial	[52]			
MCO 16-relayrace	graph, dijkstra	5	Editorial	[52]			
JOI 13-ModernMansion	graph, dijkstra	5		[52]			
infoarena secvmax	graph, dsu , [Romanian txt]	5	Sol	[53]			1
POI 07-Offices	graph, dsu	5	Editorial	[53]			1
NOI 16-rock_climbing	graph, max-flow, bipartite match	5	Editorial	[58]			
COCI 07-Kuhar	math, binary search	5	Editorial	[68]			2
IOI 05-mean	math, observation	5	Editorial	[68]			2
NOI 15-radioactive	math	5	Editorial	[68]			
CEOI 10-PIN	math, inclusion-exclusion, bitmasks	5	Sol	[86]			1
IOIQ 19-d2-A	binary search	5	Sol	[9]			3
IOIQ 19-d1-A	binary search, two pointers	5		[9]			2
CEOI 03-Register [77]	math, matrix, gaussian elimination, xor	5	Editorial	[90]			
Dmoj NextPrimeHard	math, sieve, [Miller–Rabin primality test]	5		[93]			2
POI 07-Queries	math, sieve, coprimes, LIS	5	Editorial	[93]			
POI 10-Divisor	math, sieve, Miller–Rabin test, impl	5	Editorial	[93]			
NOI 09-invest	dp, binary search, [https://github.com/Rockbet/Problems/blob/master/NOI/2007/Hole.	4.75	Editorial	[16]	p3		1
COCI 06-Bicikli	graph, scc or dp, dfs	4.5	Sol	[61]	p3 v2		3
COCI 13-Organizator	ad-hoc, sieve-like	4.5	Editorial	[1]	p3		3
COCI 06-Zbrka	dp	4.5	Editorial	[16]	p3	1	3
COCI 06-Bond	dp, dp_bitmasks, [https://pastebin.com/2LyrBGjz]	4.5	Editorial	[24]	p3		2
Baltic 16-bosses	graph, trees, dfs	4.5	Sol	[46]	p3		12
NOI 07-hole	binary search or dp	4.5	Sol	[9]	p3		3
COCI 13-Ratar	impl, matrix, preprocessing	4.5	Editorial	[109]	p2		1
SNSS 18-R5-A	dp	4.5	Sol	[16]	p2		1
ROJS 17-set_subtraction	greedy	4.5		[32]	p2		1
NOI 13-diesel	graph, dijsktra or bfs, [ignore subtask 5/6 in evaluation]	4.5	Sol	[46]	p2		2

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
COI 08-Reljef	graph, dfs	4.5	Editorial	[50]	p2		1
POI 05-Cash	binary search	4.5	Sol	[9]	p2		1
infoarena bile6	ad-hoc, constructive, [Romanian txt]	4.5	Sol	[1]			1
COCI 19-preokret	ad-hoc	4.5		[1]			
EOIQ 18-r2-A	impl	4.5		[109]			1
IZhO 13-Trading	segment tree, sweep, arithmetic progression	4.5	Sol	[13]			3
infoarena nrsec	bit, binary search	4.5	Sol	[15]			1
IOI 01-mobile	bit, 2d bit	4.5	Editorial	[15]			1
Baltic 05-Ancient	dp, [cases]	4.5	Editorial	[16]			1
JOI 16-Oranges	dp, [**JAPANESE**]	4.5	AC	[16]			1
infoarena tablou	dp, prefix sums	4.5	Sol	[16]			1
USACO 12nov-bbreeds-gold	dp	4.5		[16]			1
NOIMOCK 15-toblerone	dp	4.5		[16]			
COCI 06-Tenis	todo	4.5	Editorial	[222]			2
COCI 08-Jez	todo	4.5	Editorial	[222]		1	1
COCI 08-Cuskija	todo	4.5	Editorial	[222]			1
COCI 06-Liga	todo	4.5	Editorial	[222]			1
EOI 18-d1-B	greedy. sorting	4.5		[32]		1	2
infoarena copii2	greedy, divide and conquer, [Romanian txt]	4.5	Sol	[32]			1
Infoarena sir42	greedy, [text summry in sol]	4.5	Sol	[32]			1
infoarena incurcatura	graphs, data structures, [Romanian txt]	4.5	Sol	[46]			1
infoarena abx	math, [=CF955-C]	4.5	Sol	[68]			1
MCO 14-random	math, seive	4.5	Sol No Edit	[68]			
infoarena color	math, combinatorics	4.5	Sol	[82]			1
COCI 18-karte	greedy, ad-hoc, impl	4	Sol	[32]	p3 v1		9
COCI 17-igra	ad-hoc, lexi	4	Editorial	[1]	p3		1
NOI 19-lasers	ad-hoc	4		[1]	p3		1
COCI 14-studentsko	dp, lis or greedy	4	Sol	[16]	p3		4
POI 11-Temp	datastructures, binary search, impl, [POI11_tem]	4	Sol	[4]	p3	1	2
COCI 13-ladice	graph, dsu, cycles	4	Editorial	[53]	p3		2
infoarena cate3cifre	math, impl	4	Sol	[68]	p3		1
IOI 17-coins	math, xor	4		[68]	p3		1
COCI 17-uzastopni	math, summations, ad-hoc or binary search	4	sol	[77]	p3		4
IOIPractice 19-cycle	binary search, interactive	4	Sol	[9]	p3		6
COCI 14-Mravi	ad-hoc	4	Editorial	[1]	p2		2
NOI 08-gecko	ad-hoc	4	Editorial	[1]	p2		1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
IPSC 18-H1	ad-hoc, interactive	4		[1]	p2		1
IPSC 18-J1	ad-hoc, constructive	4		[1]	p2		1
Balkan 05-SailingRace	dp	4	Sol (no edit	[16]	p2		1
CEOI 12-Jobs	greedy, datastructures, impl	4	Sol	[32]	p2		8
COCI 17-lozinke	greedy, datastructures	4	Sol	[32]	p2		5
COCI 07-Dejavu	geometry	4	Editorial	[37]	p2		1
NOI 08-lvm	datastructures, impl, [easy idea]	4	Editorial	[4]	p2		1
NOI 10-card	datastructures, impl, [easy idea]	4	Editorial	[4]	p2		1
DWITE 11-CubeWorld	graph	4		[46]	p2		1
COCI 06-Slikar	graph, bfs	4	Editorial	[48]	p2		2
COCI 07-Jabuke	math	4	Editorial	[68]	p2		1
COCI 09-Dobra	math, combinatorics, bf	4	Editorial	[82]	p2		1
IOI 06-writing	ad-hoc, hashing	4	Editorial	[1]			2
COCI 14-Kriza	ad-hoc	4	Editorial	[1]			1
POI 10-Test	ad-hoc	4	Editorial	[1]			
IOI 17-cup	ad-hoc	4		[1]			
EOIQ 18-r1-A	impl	4		[109]			3
IOIQ 19-r2-C	impl	4		[109]			2
infoarena cmmp	impl, math	4	Sol	[109]			1
EOIQ 18-r1-C	impl	4		[109]			1
IOIQ 18-r1-B	impl	4		[109]			1
Infoarena lautari [78]	two pointers, impl	4	Sol	[110]			1
JOI 20-JJOOII2	two pointers, [JOI20_ho_t2]	4	Sol	[110]			1
EOIQ 18-r2-B	two pointers, map	4		[110]			1
NOI 08-rank	graph, dfs, topological sort, [https://github.com/ZeyadKhattab/Competitive-Programm	4	Editorial	[119]			1
IOI 07-miners	dp, [basic, leave or take]	4	Editorial	[16]			9
COCI 19-slicice	dp	4	Sol	[16]			2
COCI 18-mate	dp	4		[16]			2
IOIQ 19-r1-C	dp, lis	4		[16]			2
NOI 10-poke_company	dp or greedy	4	Editorial	[16]			1
NOI 18-journey	dp, graph	4	Editorial	[16]			1
CCO 18-GeeseVsHawks	dp	4	Sol	[16]			1
NOI 12-walking	dp, lcs, [np-hard-special-case-reduce]	4	Editorial	[16]			1
JOI 13-TakeIOITrain	dp, impl, [**JAPANESE**]	4		[16]			
JOI 19-Bitaro	bf, [JOI19_ho_t1]	4		[2]			8
COCI 06-Sjecista	todo	4	Editorial	[222]			1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
POI 12-Rendezvous	todo	4	Editorial	[222]			
COI 14-nizovi	todo, interaction	4	Editorial	[222]			
JOISC 14-JOIOJI	todo, [**JAPANESE**]	4		[222]			
COCI 16-kronican	dp, dp_bitmasks	4	Editorial	[24]		1	5
infoarena jsched	greedy, [Romanian txt]	4	Sol	[32]			1
infoarena kcover	greedy, sortings, [Romanian txt]	4	Sol	[32]			1
COCI 13-Lopov	greedy, sorting, multiset	4	Editorial	[32]			1
POI 04-Spies	greedy, graph	4	Editorial	[32]			
NOIMOCK 15-marbles	greedy	4		[32]			
infoarena heavymetal	datastructures, greedy, [Romanian txt]	4	Sol	[4]			1
NOIMOCK 15-lilypads	datastructures, graph	4		[4]			
Info1Cup 19-Subway	graph, trees, constructive algorithms, [where OJ]	4	Sol	[46]			1
JOI 15-RailroadTrip	graph, [**JAPANESE**]	4	Sol	[46]			1
POI 08-Blocks	graph, tree, datastructures	4	Editorial	[46]			
POI 08-Toll	graph, bfs	4	Editorial	[48]			
COCI 20-politicari	graph, dfs, todo link	4	Sol	[50]			1
COCI 18-alkemija	graph, dfs	4		[50]			1
COCI 07-George	graph, dijkstra	4	Editorial	[52]			1
MCO 15-trains	graph, dijkstra	4	Sol No Edit	[52]			
JOI 13-illumination	graph, dijkstra, [JAPANESE]	4		[52]			
COCI 09-svemir	graph, mst	4	Editorial	[60]			1
NOI 08-nprime	math, primes	4	Editorial	[68]			1
NOI 11-sequence	math, number theory, [unclear text?]	4	Editorial	[68]			1
EOI 19-d2-A	math	4		[68]			1
COCI 09-Genijalac	math, gcd, impl	4	Editorial	[73]			1
POI 05-Knights	math, gcd, [pascal code]	4	Editorial	[73]			
IOI 09-mecho	binary search, bfs	4	Sol	[9]		1	5
COCI 20-spiderman	math, sieve, [todo link]	4		[93]			1
NOI 18-lightningrod	greedy, stack	3.5	Editorial	[32]	p2		2
COCI 15-baloni	greedy, set, [strictl tl, multset TLE]	3.5	Sol	[32]	p2		2
infoarena munte4	ad-hoc, sliding window	3.5	Sol	[1]			1
COCI 15-Han	ad-hoc, impl	3.5		[1]			1
infoarena pm2	graph, dfs, topological sort, bfs	3.5	Sol	[119]			1
infoarena cerc3	dp, sorting	3.5	Sol	[16]			1
infoarena marceland	bfs, implementation	3.5	Sol	[2]			1
COCI 07-Nikola	todo	3.5	Editorial	[222]			1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
COCI 14-Coci	todo	3.5	Editorial	[222]			
COCI 14-Silueta	todo	3.5	Editorial	[222]			
COCI 14-Kratki	todo	3.5	Editorial	[222]			
EOIQ 18-r1-B	greedy	3.5		[32]			2
COCI 17-unija	geometry, rectangles, inversion	3.5	Editorial	[37]			2
infoarena rfinv	graphs, shortest paths, [Romanian txt]	3.5	Sol	[46]			1
COCI 19-zamjena	graph, dsu	3.5		[53]			2
EOI 18-d2-A	math	3.5		[68]			1
COCI 19-cipele	binary search, greedy	3.5		[9]			2
Baltic 11-Plagarism	binary search, datastructures	3.5	Editorial	[9]			1
infoarena album2	impl	3	Sol	[109]	p3		1
POI 05-Banks	graph, dsu	3	Editorial [7	[53]	p3		2
COCI 13-sumo	ad-hoc or bipartite match, binary search	3	Editorial	[1]	p2		1
COCI 07-Srednji	ad-hoc	3	Editorial	[1]	p2		1
COCI 14-Zabava	dp, math	3	Editorial	[16]	p2		1
NOI 18-collectmushrooms	ad-hoc, prefix sum	3	Editorial	[1]			2
COCI 17-zigzag	ad-hoc, trivial	3		[1]			2
JOI 20-Neckties	ad-hoc, prefix_sums, sorting [JOI20_ho_t1]	3	sol	[1]			1
Baltic 07-Sound	ad-hoc, sliding window, datastructures	3	Editorial	[1]			1
COCI 16-pohlepko	ad-hoc	3	Editorial	[1]			1
COCI 06-Firefly	ad-hoc, prefix sum	3	Editorial	[1]			1
COCI 06-Tetris	ad-hoc	3	Editorial	[1]			1
COCI 18-timovi	ad-hoc, impl	3		[1]			1
Datatähti Open19-B	ad-hoc, prefix sum	3		[1]			1
COCI 09-Dosadan	ad-hoc, hex	3	Editorial	[1]			
POI 06-Disks	ad-hoc	3	Editorial	[1]			
POI 08-Postering	ad-hoc	3	Editorial	[1]			
POI 09-Elephants	ad-hoc	3	Editorial	[1]			
POI 09-Pebbles	ad-hoc	3	Editorial	[1]			
POI 10-Guilds	ad-hoc	3	Editorial	[1]			
IOI 09-garage	impl	3	Editorial	[109]			8
IOIQ 19-r1-A	impl	3		[109]			2
IOIQ 19-r2-B	impl	3		[109]			2
COCI 17-tetris	impl	3		[109]			1
COCI 16-nizin	two pointers	3	Editorial	[110]			3
Info1Cup 19-Mean	dp, [where OJ]	3	Sol	[16]			1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
COCI 14-acm	dp	3	Editorial	[16]			
COCI 14-Niko	bf	3	Editorial	[2]		1	2
IOI 16-laugh	bf	3	Editorial	[2]			2
Baltic 11-Ice Cream	bf, impl	3	Editorial	[2]			1
COCI 08-Mravojed	todo	3	Editorial	[222]			
COCI 08-Skocimis	todo	3	Editorial	[222]			
COCI 08-Perket	todo	3	Editorial	[222]			
COCI 14-Psenica	todo	3	Editorial	[222]			
COCI 14-Meteor	todo	3	Editorial	[222]			
IOI 01-BinaryCodes	todo, backup task	3	Editorial	[222]			
POI 12-Letter	todo	3	Editorial	[222]			
COCI 06-Okviri	todo	3	Editorial	[222]			
COCI 06-Maraton	todo	3	Editorial	[222]			
COCI 06-Bard	todo	3	Editorial	[222]			
JOI 18-stove	greedy	3	Sol	[32]			8
Infoarena calorifer	greedy, sorting, math, [text summry in sol]	3	Sol	[32]			1
NOI 11-change	greedy, bf	3	Editorial	[32]			1
BalticPractice 18-NinetyNinePractice	greedy, number theory, [test interactive problem]	3		[32]			1
COCI 17-programiranje	datastructures	3		[4]			2
COCI 12-razlika	datastructures, sliding window	3	Editorial	[4]			
POI 07-Symmetry	geometry, polygon, palindrome	3	Editorial	[40]			
COCI 12-hipercijevi	graph, bfs	3	Editorial	[48]			
COCI 16-jetpack	graph, dfs	3	Editorial	[50]			1
NOI 10-sail	graph, dijkstra	3	Editorial	[52]			
MCO 17-TravellingSalesman	graph, dijkstra	3	Editorial	[52]			
CCC 13-Factor_Solitaire	math	3		[68]			1
COCI 16-tavan	math, base conversion	3	Editorial	[68]			
COCI 17-savrsen	math, sieve	3	Editorial	[93]			
COCI 17-cezar	ad-hoc, trivial	2.5		[1]			3
COCI 12-sahovnica	ad-hoc, impl	2.5	Editorial	[1]			1
Info1Cup 19-Treasure	impl, string, stack, [where OJ]	2.5	Sol	[109]			1
COCI 19-nadan	ad-hoc, trivial, [COCI18_nadan]	2		[1]			2
COCI 08-Cross	ad-hoc, trivial	2	Editorial	[1]			1
COCI 08-Rot	ad-hoc, trivial	2	Editorial	[1]			1
COCI 09-Kajak	ad-hoc, trivial	2	Editorial	[1]			1
COCI 12-sume	ad-hoc, math	2	Editorial	[1]			1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
NOI 08-4sum	ad-hoc	2	Editorial	[1]			1
COCI 07-Tajna	ad-hoc	2	Editorial	[1]			1
COCI 17-izbori	ad-hoc, trivial	2		[1]			1
COCI 17-rasvjeta	ad-hoc, trivial	2		[1]			1
COCI 08-Jabuka	ad-hoc, trivial	2	Editorial	[1]			
COCI 08-Jagoda	ad-hoc, trivial	2	Editorial	[1]			
COCI 08-Ljesnjak	ad-hoc, trivial	2	Editorial	[1]			
COCI 08-Bazen	ad-hoc, trivial	2	Editorial	[1]			
COCI 08-Nered	ad-hoc, trivial	2	Editorial	[1]			
COCI 06-Herman	ad-hoc, trivial	2	Editorial	[1]			
COCI 06-ABC	ad-hoc, trivial	2	Editorial	[1]			
COCI 06-npuzzle	ad-hoc, trivial	2	Editorial	[1]			
COCI 06-Prsteni	ad-hoc, trivial	2	Editorial	[1]			
COCI 06-Skener	ad-hoc, trivial	2	Editorial	[1]			
COCI 06-Natrij	ad-hoc, trivial	2	Editorial	[1]			
COCI 06-Magija	ad-hoc, trivial	2	Editorial	[1]			
COCI 07-Peg	ad-hoc, trivial	2	Editorial	[1]			
COCI 07-Prva	ad-hoc, trivial	2	Editorial	[1]			
COCI 07-Vauvau	ad-hoc, trivial	2	Editorial	[1]			
COCI 07-Veci	ad-hoc, trivial	2	Editorial	[1]			
COCI 07-Parking	ad-hoc, trivial	2	Editorial	[1]			
COCI 07-Semafori	ad-hoc, trivial	2	Editorial	[1]			
COCI 07-Platforme	ad-hoc, trivial	2	Editorial	[1]			
MCO 17-CableCars	ad-hoc	2	Editorial	[1]			
MCO 15-honey	ad-hoc	2	Sol No Edit	[1]			
COCI 09-Kutevi	ad-hoc, trivial	2		[1]			
IOI 10-cluedo	impl	2	Editorial	[109]			4
IOI 10-memory	impl	2	Editorial	[109]			2
COCI 09-Rimski	impl	2	Editorial	[109]			1
COCI 09-Razgovori	impl, [boring]	2	Editorial	[109]			1
COCI 09-Program	impl	2	Editorial	[109]			1
IOI 00-palindrome	dp	2	Editorial	[16]			
COCI 20-emacs	bf, todo link	2	Sol	[2]			1
CCCMock 19-PusheenPuzzlePresent	bf	2		[2]			1
DatatähtiOpen 19-A	bf, impl	2		[2]			1
COCI 09-Natjecanje	todo	2	Editorial	[222]			1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
COCI 20-birmingham	todo	2		[222]			1
COI 08-Cijevi	todo	2	Editorial	[222]			
COCI 14-Pripreme	todo	2	Editorial	[222]			
COCI 14-Zmija	todo	2	Editorial	[222]			
COCI 15-Molekule	todo	2	Editorial	[222]			
MCO 14-passport	todo	2	Sol No Edit	[222]			
COCI 12-lanci	greedy	2	Editorial	[32]			
IOIPractice 14-family-ioi14	geometry	2	Sol	[37]			1
COCI 14-utrka	datastructures	2		[4]			3
COCI 06-Kolone	datastructures	2	Editorial	[4]			1
COCI 12-malcolm	geometry, sweep line	2	Editorial	[44]			
NOI 10-weather	graph	2	Editorial	[46]			
COCI 18-birokracija	graph, dfs	2		[50]			4
COCI 06-Trojke	math	2	Editorial	[68]			1
CCCMock 19-PusheensReportCard	math	2		[68]			1
COCI 17-turnir	math, binary search	2	Editorial	[68]			
COCI 12-ljubomora	binary search	2	Editorial	[9]			
COCI 18-olivander	ad-hoc, trivial	1		[1]			2
IOI 16-reverse	ad-hoc, trivial	1		[1]			2
COCI 13-misa	ad-hoc, trivial	1	Editorial	[1]			1
NOI 09-xmas	ad-hoc	1	Editorial	[1]			1
NOI 11-paint	ad-hoc, trivial	1	Editorial	[1]			1
MCO 15-badminton	ad-hoc, trivial	1	Sol No Edit	[1]			1
COCI 14-Dom	ad-hoc, dfs	1		[1]			1
COCI 14-Klopka	ad-hoc	1		[1]			1
COCI 14-prosjek	ad-hoc, trivial	1		[1]			1
COCI 15-esej	ad-hoc	1		[1]			1
COCI 17-aron	ad-hoc, trivial	1		[1]			1
COCI 17-bridz	ad-hoc, trivial	1		[1]			1
COCI 17-kosnja	ad-hoc, trivial	1		[1]			1
COCI 17-tuna	ad-hoc, trivial	1		[1]			1
COCI 18-spirale	ad-hoc, trivial	1		[1]			1
IZhO 11-triangle	ad-hoc, trivial	1		[1]			1
COCI 08-Pet	ad-hoc, trivial	1	Editorial	[1]			
COI 08-Majstor	ad-hoc, trivial	1	Editorial	[1]			
COI 08-Nop	ad-hoc, trivial	1	Editorial	[1]			

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
COCI 12-f7	ad-hoc, trivial	1	Editorial	[1]			
COCI 14-Paprika	ad-hoc, trivial	1	Editorial	[1]			
COCI 14-Teta	ad-hoc, trivial	1	Editorial	[1]			
COCI 16-go	ad-hoc, trivial	1	Editorial	[1]			
COCI 16-imena	ad-hoc, trivial	1	Editorial	[1]			
COCI 17-kartomat	ad-hoc, trivial	1	Editorial	[1]			
COCI 17-pareto	ad-hoc, trivial	1	Editorial	[1]			
COCI 17-telefoni	ad-hoc, trivial	1	Editorial	[1]			
NOI 07-jawbreak	ad-hoc	1	Editorial	[1]			
NOI 07-gift	ad-hoc, trivial	1	Editorial	[1]			
COCI 06-Modulo	ad-hoc, trivial	1	Editorial	[1]			
COCI 06-R2	ad-hoc, trivial	1	Editorial	[1]			
COCI 07-Bijele	ad-hoc, trivial	1	Editorial	[1]			
COCI 07-Tri	ad-hoc, trivial	1	Editorial	[1]			
COCI 14-Cesta	ad-hoc, trivial	1		[1]			
COCI 14-mobitel	ad-hoc, trivial	1		[1]			
COCI 14-Piramida	ad-hoc, trivial	1		[1]			
COCI 14-Strojopis	ad-hoc, trivial	1		[1]			
COCI 14-Traktor	ad-hoc, trivial	1		[1]			
COCI 15-akcija	ad-hoc, trivial	1		[1]			
COCI 15-Deathstar	ad-hoc, trivial	1		[1]			
COCI 15-geppetto	ad-hoc, trivial	1		[1]			
COCI 15-marko	ad-hoc, trivial	1		[1]			
COCI 15-pot	ad-hoc, trivial	1		[1]			
COCI 17-hindeks	ad-hoc, trivial	1		[1]			
NOISelection 11-bunnyhop	ad-hoc, trivial	1		[1]			
COCI 16-tarifa	impl	1		[109]			4
COCI 13-Trener	impl, stl	1	Editorial	[109]			2
COCI 15-Yoda	impl	1		[109]			1
COCI 18-magnus	impl, math	1		[109]			1
COCI 18-pismo	impl, math	1		[109]			1
COCI 19-elder	impl, math	1		[109]			1
COCI 19-konj	impl, math	1		[109]			1
COCI 19-lun	impl, math	1		[109]			1
IOI 09-poi	bf, impl	1	Sol	[2]			4
COCI 17-baza	bf	1		[2]			2

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
COCI 14-Funghi	bf	1		[2]			1
COCI 15-karte	bf	1		[2]			1
COCI 20-datum	todo	1		[222]			1
COCI 08-Ptice	todo	1	Editorial	[222]			
COCI 08-Kornislav	todo	1	Editorial	[222]			
COCI 08-Reseto	todo	1	Editorial	[222]			
COCI 08-Kemija	todo	1	Editorial	[222]			
COCI 08-Datum	todo	1	Editorial	[222]			
COCI 08-Mjehuric	todo	1	Editorial	[222]			
COCI 08-Buka	todo	1	Editorial	[222]			
COCI 09-Domino	todo	1	Editorial	[222]			
COCI 09-Faktor	todo	1	Editorial	[222]			
COCI 09-Filip	todo	1	Editorial	[222]			
COCI 09-Slatkisi	todo	1	Editorial	[222]			
COCI 09-Sort	todo	1	Editorial	[222]			
COCI 09-Autori	todo	1	Editorial	[222]			
COCI 09-Planina	todo	1	Editorial	[222]			
COCI 09-Cudoviste	todo	1	Editorial	[222]			
COCI 09-Sok	todo	1	Editorial	[222]			
COCI 09-Cokolada	todo	1	Editorial	[222]			
COCI 09-Spavanac	todo	1	Editorial	[222]			
COCI 06-Patuljci	todo	1	Editorial	[222]			
COCI 06-Sibice	todo	1	Editorial	[222]			
COCI 06-Trik	todo	1	Editorial	[222]			
COCI 06-Prase	todo	1	Editorial	[222]			
COCI 07-Cetvrta	todo	1	Editorial	[222]			
COCI 07-Prinova	todo	1	Editorial	[222]			
COCI 07-Crne	todo	1	Editorial	[222]			
COCI 07-Cetiri	todo	1	Editorial	[222]			
COCI 07-Oktalni	todo	1	Editorial	[222]			
COCI 07-Pascal	todo	1	Editorial	[222]			
COCI 09-Note	todo	~~1~~		[222]			
NOI 16-lunchbox	greedy, sorting	1	Editorial	[32]			1
COCI 18-prosjek	greedy	1		[32]			1
NOISelection 10-crunchy	greedy, sorting	1		[32]			
POI 15-Trips	math, matrix, matrix pow, [kth shortest path]		Sol	[89]	p3		1

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
IOI 02-xor	ad-hoc, impl, [output only]		Editorial	[1]			1
POI 11-prz	ad-hoc, sorting		Editorial	[1]			
POI 13-ins	ad-hoc, impl		Editorial	[1]			
NOIPrelim 18-snail	ad-hoc			[1]			
NOISelection 15-globalwarming2	ad-hoc			[1]			
NOISelection 18-spotlights	ad-hoc			[1]			
NOISelection 18-stagegames	ad-hoc			[1]			
NOI 06-claw	dp, graph			[16]			
NOIPrelim 18-knapsack	dp			[16]			
NOISelection 14-sardines	dp			[16]			
NOISelection 14-schedule	dp			[16]			
NOISelection 15-diversity	dp			[16]			
NOISelection 15-orchard2	dp			[16]			
NOISelection 16-catteams	dp, datastructures			[16]			
NOISelection 18-llis	dp			[16]			
NOISelection 18-modules	dp, greedy			[16]			
NOISelection 18-supperbox	dp, datastructures			[16]			
Baltic 18-Worm	bf, [short code but no one full score in contest - todo]		Editorial	[2]			
NOISelection 14-anglerfish	bf			[2]			
Baltic 06-City	todo			[222]			1
Baltic 06-Coin	todo			[222]			1
MWC 15-ToweringTowers	todo			[222]			1
POI 18-Diversity	todo			[222]			1
POI 18-Lawyers	todo			[222]			1
Balkan 05-Couples	todo			[222]			
Balkan 05-CPU	todo			[222]			
Balkan 05-Requests	todo			[222]			
Balkan 05-Tickets	todo			[222]			
Balkan 05-WordCounting	todo			[222]			
Balkan 09-NewBeginning	todo			[222]			
Balkan 09-Strip	todo			[222]			
Balkan 12-BOI_handsome	todo			[222]			
Balkan 04-two_sequences	todo			[222]			
Balkan 04-great_student	todo			[222]			
POI 11-dyn	todo		Editorial	[222]			
POI 13-gob	todo, long impl		Editorial	[222]			

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
APIO 13-tasksauthor	todo, [output only]			[222]			
BalticWarmup 17-BirdRescue	todo			[222]			
BalticWarmup 17-PongTournament	todo			[222]			
COCI 18-nlo	todo			[222]			
COCI 18-prakticni	todo			[222]			
COCI 19-akvizna	todo			[222]			
COCI 19-jarvis	todo			[222]			
COCI 19-kisik	todo			[222]			
COCI 19-slagalica	todo			[222]			
COCI 19-titlovi	todo			[222]			
COCI 19-wand	todo			[222]			
Dmoj NextPrime	todo			[222]			
HAOI 07-idealsquare	todo			[222]			
info1cup 17-binary	todo			[222]			
info1cup 17-eastereggs	todo			[222]			
info1cup 17-permutation	todo			[222]			
info1cup 17-xorsum	todo			[222]			
info1cup 18-balancedtree	todo			[222]			
info1cup 18-cambridge	todo			[222]			
info1cup 18-del13	todo			[222]			
info1cup 18-norela	todo			[222]			
info1cup 18-palindromes	todo			[222]			
info1cup 18-shell	todo			[222]			
info1cup 18-thegrade	todo			[222]			
innopolis 18-final_A	todo			[222]			
innopolis 18-final_B	todo			[222]			
innopolis 18-final_C	todo			[222]			
innopolis 18-final_D	todo			[222]			
innopolis 18-final_E	todo			[222]			
INOI 16-brackets_inoi	todo			[222]			
IOIPractice 14-square	todo			[222]			
IOIPractice 14-station	todo			[222]			
IOIPractice 14-tile	todo			[222]			
IOIPractice 17-notice	todo, judge?			[222]			
IZhO 14-ufo	todo			[222]			
JOI 14-Cutting	todo, [**JAPANESE**]			[222]			

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
JOI 15-Ball	todo, [**JAPANESE**]			[222]			
JOI 15-Rampart	todo, [**JAPANESE**]			[222]			
JOI 16-Territory	todo, [**JAPANESE**]			[222]			
JOI 17-rope	todo			[222]			
JOIOC 13-disparity	~~todo, NOT available~~			[222]			
JOIOC 15-coloredTiles	~~todo, [output only]~~			[222]			
NOI 06-ecasino	todo			[222]			
NOI 06-fludtown	todo			[222]			
NOI 06-genome	todo			[222]			
NOI 06-heng	todo			[222]			
NOISelection 10-jungle	todo			[222]			
NOISelection 10-trianglesum	todo			[222]			
NOISelection 11-mantou	todo			[222]			
NOISelection 11-message	todo			[222]			
NOISelection 11-puzzle	todo			[222]			
NOISelection 11-repair	todo			[222]			
NOISelection 12-draw	todo			[222]			
NOISelection 12-ice	todo			[222]			
NOISelection 12-ramar	todo			[222]			
NOISelection 15-lazycat2	todo			[222]			
NOISelection 17-builderswand	todo			[222]			
NOISelection 17-clipboard	todo			[222]			
NOISelection 17-dinnerbox	todo			[222]			
NOISelection 17-lost	todo			[222]			
NOISelection 17-mooshroomfarm	todo			[222]			
NOISelection 17-mushroomfarm	todo			[222]			
NOISelection 17-redstonelamps	todo			[222]			
NOISelection 17-runway	todo			[222]			
NOISelection 17-trekking	todo			[222]			
NOISelection 17-trianglecraft	todo			[222]			
NOISelection 18-crab	todo			[222]			
POI 14-Snake	todo			[222]			
POI 17-Containers	todo			[222]			
POI 17-Cook	todo			[222]			
POI 17-Crossroads	todo			[222]			
POI 17-Difference	todo			[222]			

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
POI 17-Divisibility	todo			[222]			
POI 17-Flappy_Bird	todo			[222]			
POI 17-Grades	todo			[222]			
POI 17-Midas	todo			[222]			
POI 17-Panini	todo			[222]			
POI 17-Sabotage	todo			[222]			
POI 17-Sum	todo			[222]			
POI 17-Tourist	todo			[222]			
POI 18-Bike	todo			[222]			
POI 18-Candy	todo			[222]			
POI 18-Conductor	todo			[222]			
POI 18-Fence	todo			[222]			
POI 18-Flood	todo			[222]			
POI 18-Numbers	todo			[222]			
POI 18-Poetry	todo			[222]			
POI 18-Stone	todo			[222]			
POI 18-Subway	todo			[222]			
POI 18-Taxis	todo			[222]			
POI 18-Transceivers	todo			[222]			
POI 18-Triinformathlon	todo			[222]			
POI 11-imp	greedy, [short]		Editorial	[32]			
Baltic 18-Alternating	greedy or ad-hoc		Editorial	[32]			
NOISelection 16-catlunch	greedy, datastructures			[32]			
POI 13-Maze	geometry, [short]		Editorial	[37]			
NOISelection 14-ikanbilis	datastructures			[4]			
NOISelection 14-middlenumber	datastructures			[4]			
NOISelection 15-rotarylock	datastructures			[4]			
NOISelection 16-catgameshow	datastructures			[4]			
NOISelection 16-counting	datastructures			[4]			
JOISC 18-roadservice	~~graph, [no submit]~~		sol (See re	[46]			
POI 13-spa	graph, search		Editorial	[46]			
NOIPrelim 18-island	graph, math			[46]			
NOISelection 10-chessislands	graph			[46]			
NOISelection 11-journey	graph			[46]			
NOISelection 14-ship	graph			[46]			
NOISelection 16-cattown	graph			[46]			

Name	Category	Level	Sol	Category ID	Importance	Can't solve	Tried to solve
NOISelection 16-teleporters	graph			[46]			
NOISelection 18-rookable	graph			[46]			
NOISelection 18-superfanclub	graph			[46]			
IOIPractice 14-totem	graph, bfs			[48]			
NOISelection 15-portal_st2015	graph, bfs			[48]			
NOISelection 12-stones	graph, dfs			[50]			
NOISelection 11-superlongnoodles	graph, dijkstra, math			[52]			
NOISelection 12-waddlehop	graph, dijkstra			[52]			
NOISelection 14-nemo	graph, dsu			[53]			
NOISelection 15-sightseeing2	graph, mst			[60]			
NOI 06-euclid	math, number theory			[68]			
NOISelection 11-factortiles	math, number theory			[68]			
NOISelection 15-access_code	math			[68]			
NOISelection 16-bananaflood	math			[68]			
NOISelection 16-catnames	math			[68]			
NOISelection 18-spiraldance	math			[68]			

[1] English text: http://apio-olympiad.org/2011/apio2011-English.pdf

[2] correction: constraints for n is actually 2e5

[3] Given n <= 2e5 points and m <= 1e5 circles, find for each of the circles how many points has inside or on the circle. The surfaces covered by any pair
of two circles don't have common points

[4] You are given a 3d grid where some spaces are full of stone ('N') and some are full of air ('P')
You need to find a cuboid that is completely made up of stone, has two sides of equal length, and has the maximum value of 4*a*b, where a and b are the two different length values among the sides.
Print that maximum value of 4*a*b.

[5] English text: http://apio-olympiad.org/2011/apio2011-English.pdf

[6] Can u AC on https://www.spoj.com/problems/SPATHS/ ?

English text: https://github.com/mostafa-saad/MyCompetitiveProgramming/blob/master/Olympiad/Balkan/official/2012/2012-statements.pdf

[7] Problem was available on https://oj.uz/problem/view/IOI10_saveit (e.g. see old submissions), then server disabled it!

IO in case: https://ioi2010.org/CompetitionTask.shtml

[8] You're given a tree with weighted edges. Define f(S) for some subset of the nodes as follows:
- First, take the xor sum of the weights of the nodes in S. Let this result be X
- Next, take the node with least weight on the shortest path between the nodes in S. Let the weight be Y
- f(S) = X ^ Y

E.g. if we have 1 -- 2 -- 3, then f({1, 3}) = v[1] ^ v[3] ^ v[k] where v[k] = min(v[1], v[2], v[3])
Find the sum of f(S) for all subsets of the nodes, modulo 1e9+7

[9] You could use this grader https://github.com/quangloc99/CompetitiveProgramming/tree/master/olympiad/CEOI/2016/icc-custom-grader

[10] https://github.com/updown2/OI-Practice/blob/master/COCI/2009%20Holmes.cpp

[11] Given a directed graph with n vertexes and m edges, find the popular vertexes in the graph. A popular vertex i is a vertex such that for each other node, one can either get from i to that node or one can get from that node to i

[12] Use google translate

NOTE: "\n" in end of file is required for AC

[13] Given a n*n matrix with latin lowercase letters, find how many submatrices exist such that upper left and lower right corner letters are bigger than all other letters

[14] Given the graph described in the statement, find how many pairs (a, b) exist such that we can get from (0, a) to (F-1, b)

[15] Find the number of n*n binary matrices such that each line has two ones, each column has two ones and there are no four ones such that they form a rectangle

[16] Find out the number of simple undirected graphs having N vertices with the property that in each connected component the number of vertices is equal to the number of edges. In addition, every cycle's length must be at least K.

[17] Given an array. Find the length of a subarray that its contains every number from 1 to the maximum number in it.

[18] find sum of all numbers x with n digits such that x doesn't have 0, x mod k = 0 and reverse(x) mod k = 0

[19] Given an array of n(n <= 1e6, v[i] <= 1e6) numbers and q(q <= 1e6) queries, find for each query if we can remove at most 1 element such that gcd of the range is > 1)

[20] You may solve CSA41-E first

[21] https://github.com/QuickSorting/CompetitiveProgramming/blob/master/Olympiad/USACO/USACO%2018mar-sortgold.cpp

[22] Another OJ https://www.acmicpc.net/problem/5496

[23] Notice the given: device.h

[24] WARNING. A lot of precision issues. You may try using EPS of 1e-9 and use long doubles. At least worked well in 1 solution.

[25] Given a tree with n nodes, color the tree nodes in black or white so that the number of (unordered) pairs of twin nodes is maximum. Two nodes are twinned if and only if both are white and either are bound directly by an edge, or the single elemental chain of them contains only black nodes.

[26] Given a tree with n nodes, rooted at node 1, a number p and the time we need to visit each of the n towns, find the number of ways we can block edges in the tree such that the sum of the visiting times of the cities we can visit from node 1 is exactly p modulo 31333. Two ways differ if there is some edge (a, b) which is blocked in the first way but not in the second way

[27] Given a tree with n nodes, there are two clans and Q days. On ith day, the second clan conquers from the first clan city Qi and we need

to print after each day, the max distance between two nodes in each of the sets(one can pass enemy nodes, but can't start or stop the trip there)

[28] English txt https://ioinformatics.org/files/ioi2002problem5.pdf

[29] Given an undirected graph with n vertexes and m edges, estimate in how many days the given graph will become complete.
During a certain day, if there is no edge between nodes a and b but there is another node c such that there are
edges between a and c, respectively b and c, there will be created an edge between a and b.

[30] Given a DAG with n nodes and m edges, find the LCA for all pairs of distinct nodes

[31] Given a tree with n nodes, where each edge has a cost, and M queries of type (a, b), find for each of the given queries
a position from an edge from the tree, which is at distance b from node a

[32] problem description :
given an array A of N integers. Find how many pairs of indices (i ,j) such that i <= j and the number
of different bits in A[i] and A[j] binary representations is exactly equal to 4. (1 <= N <= 10^5 ,0 <= A[i] < 2^20)
sample case :
N = 4 ,A = {15 ,0 ,10 ,5}
pairs that differ by exactly 4 bits are (1 ,2) and (3 ,4) ,so answer = 2.

[33] use google translator

[34] Use long double

[35] wrong samples??

[36] Easier version: infoarena interact

[37] Given n, s and an array a of n elements, find a subset of array a such that the sum of the elements in that subset is s and the OR
sum of the values in the array is as small as possible

[38] Given a permutation of length n, sort it in at most 2n moves of type P x(prefix of length x is reversed) or S x(suffix of length x is reversed)

[39] read first https://en.wikipedia.org/wiki/Round-robin_tournament#Scheduling_algorithm

[40] Given an array of N elements, initially empty and M queries of type a b c, add for each element i in range [a, b], c + (i - a)th
Fibonacci number modulo 666013 and print the array resulting

[41] Given a tree with n nodes, find for each edge the maximum length of the diameter of the tree we can obtain
if we move that edge such that the given graph will keep being a tree

[42] Given n lists of strings, each of them having size k and each string has size p, and m queries, find for each query whether there

exists a list from the n lists with similarity grade equal to a certain value x

[43] Given n dwarfs, each one having a height and a length of hands, find the maximum number of dwarfs which can get out of a hole with height D. A dwarf can get out of the hole if he can get to a height >= D, using his hands, his height and possibly the heights of other dwarfs

[44] read from console not file

[45] Given a simple undirected graph with N <= 100,000 nodes and M <= 200,000 edges, with each edge having cost 0 or 1, determine a spanning tree that has a cost of exactly K. It is guaranteed that a solution exists. If there are multiple solutions, output any one of them. Output: n-1 lines, with each line representing one edge of the spanning tree

[46] English txt http://ceoi.inf.elte.hu/probarch/11/trazad.pdf

[47] Given a tree with n nodes, rooted at 1, where all values of nodes are initially empty, and m queries where at each of the queries, we either add a value q to the subtree rooted at node p, or we have to report whether it exists a node with a value z or not.

[48] Given m*n grid, find how many ways to draw segments between points from consecutive lines
exist such that there are no intersecting segments, modulo 666013

[49] Given a n*n matrix, find for q pairs of points the max cost of a road between the points in pair

[50] Google translate should work well

[51] Eng txt http://ceoi.inf.elte.hu/probarch/11/matzad.pdf

[52] Similar to https://csacademy.com/contest/round-41/task/candles/

[53] english txt: http://apio-olympiad.org/2008/apio-en.pdf

[54] rephrasing: You need to select some elements and split the elements into two equal (by sum) parts. The sum of the left part should be minimum possible. The left part goes to casino and becomes two times greater.

[55] Given 4 numbers h, n, m, p, find the minimal effort one has to do such that one climbs n stairs with total height h and distinct lengths for climbing 1 stair, the effort is the height of the stair, but for more than 1 stair, the effort is the mean value of the heights climbed + p"

[56] Given a tree with n nodes and M queries of type S, find for each of the queries the jth longest path starting from Si.
j = the number of times S was already in input

[57] official cases are weak (used on oz.uz). Please AC on dmoj.

Print new line in end of your code

[58] Given an array of n elements, split it in k continuous sequences such that the sum of the costs of each of the sequences is minimal. Cost of a sequence = abs(S - sum of values of sequence), where S is given in input too

[59] English txt ceoi.inf.elte.hu/tasks-archive/

[60] English txt ceoi.inf.elte.hu/tasks-archive/

[61] Given N points on 2D plane and M points on Ox axis, find for each of the M points the farthest point among the N points. Distance between 2 points is square of their Euclidean distance

[62] Google translate should work well

[63] Given a permutation of the first n natural numbers, perform the following algorithm: at step i, find the position of value i and put all the elements left of i at the end of the array, while keeping the original order of the array and remove i from array. Output the sum of positions

[64] English txt ceoi.inf.elte.hu/tasks-archive/

[65] From google translated statement you may think that the first player can take any cake he wants and the rule of taking a cake next to some already taken cake didnt apply. This is not the case

[66] Given a string of size 2 * n + 2, where n of the positions have "B"(a boy sits on that chair), n of the positons have "F"(a girl sits on that chair) and the remaining 2 positions have "S"(they are adjacent), nobody sits there, use moves of type (we move kids on positions k and k + 1 to the free places) so that the girls are on the left side, the boys are on the right side and the 2 free places separate the rows of boys and girls.

[67] Given n and k, find how many permutations of the first n numbers have a period = k. A period of a permutation is the number of times such that if we multiply the permutation by itself, we will get back to the starting permutation

[68] bigger constraints than POI 11 rot problem. For editorials, see rot

[69] Use google translate

[70] [use cout/cin not printf/scanf]

[71] Given a 2 * N binary matrix and a number K, find the minimal amount of time to get from (1, 1) to some square on the last column, by either moving to the adjacent squares from the same column, or by moving with at most K squares away on the other column

[72] Google Translate should be ok

[73] Google translate is ok

[74] Given a subway line with n stations, m people, (ai, bi) = ith people arrives at station ai at time bi and k trains,
find a way to schedule the trains such that the sum of the costs of each train is minimal. The cost of a train is the maximum
amount of time one of its passengers had to wait for it

[75] Try google translate

[76] Download test data from CONTEST #6

[77] English txt ceoi.inf.elte.hu/tasks-archive/

[78] Given a array of size n and 2 numbers p and q, find the number of subarrays from that array which have at least p and at most q
distinct elements

[79] https://github.com/sofhiasouza/CompetitiveProgramming/blob/master/POI/banks.cpp