

Competitive Programming







Methods to Solve (2000-present)

Use these filters to narrow down your next problem to solve:

OJ: Both → , Topic: NUS CS3230 → , Quality: Starred →

Online Judge shown: Both

Problem topics shown: NUS CS3230: Design and Analysis of Algorithms level: Sorting++, BF, D&C (+MatPow, Closest Pair), Greedy, DP (+APSP, Combinatorics, DP String), MST (+UFDS), SSSP++, String Matching, CH, NP-

hard Problems

Problem Quality: Starred

Number of problems shown (initially in CP4 order): 302

Information is up to date as of 10 February 2022

You can now sort these problems based on Distinct ACcepted Users (DACU) column.

Generally, problems with high DACU are the easier problems.

Note that we only update DACU column manually (not a live data).

Note: Column Point is only relevant for Kattis online judge.

Both OJ	Problem Title	CP4
Show All 🕶	entries	Search:

Both OJ	Problem Title	CP4
12187	online Judge Brothers	2.2c, 2D Array, Easier
12667	Colline Judge Last Blood	2.2c, 2D Array, Easier
epigdanceoff	<u>epigdanceoff</u>	2.2c, 2D Array, Easier
flowshop	<u> flowshop</u>	2.2c, 2D Array, Easier
imageprocessing	<u>imageprocessing</u>	2.2c, 2D Array, Easier
nineknights	<u>nineknights</u>	2.2c, 2D Array, Easier
00466	Childre Judge Mirror, Mirror	2.2d, 2D Array, Harder
11360	Have Fun with Matrices	2.2d, 2D Array, Harder
12291	Polyomino Composer	2.2d, 2D Array, Harder
2048	<u>2048</u>	2.2d, 2D Array, Harder
flagquiz	<u> flagquiz</u>	2.2d, 2D Array, Harder
funhouse	<u>funhouse</u>	2.2d, 2D Array, Harder
rings2	rings2	2.2d, 2D Array, Harder
01197	The Suspects	2.4b, Union-Find
01329	Corporative Network	2.4b, Union-Find
10608	Friends	2.4b, Union-Find
10685	Nature Nature	2.4b, Union-Find
almostunionfind	<u>almostunionfind</u>	2.4b, Union-Find
control	<u>control</u>	2.4b, Union-Find
ladice	<u>[adice</u>]	2.4b, Union-Find
unionfind	<u>unionfind</u>	2.4b, Union-Find
00592	Island of Logic	3.2b, Iterative (Two Loops)
01588	Conline Judge Kickdown	3.2b, Iterative (Two Loops)
12488	Colline Judge Start Grid	3.2b, Iterative (Two Loops)

Both OJ	Problem Title	CP4
blackfriday	<u>blackfriday</u>	3.2b, Iterative (Two Loops)
closestsums	<u>closestsums</u>	3.2b, Iterative (Two Loops)
golombrulers	g olombrulers	3.2b, Iterative (Two Loops)
00441	Lotto	3.2c, Three+ Nested Loops, E
00735	Dart-a-Mania	3.2c, Three+ Nested Loops, E
12515	Movie Police	3.2c, Three+ Nested Loops, E
12844	Outwitting the Weighing Ma	3.2c, Three+ Nested Loops, E
cudoviste	<u>cudoviste</u>	3.2c, Three+ Nested Loops, E
npuzzle	<u>Manuzzle</u>	3.2c, Three+ Nested Loops, E
set	<u>set</u>	3.2c, Three+ Nested Loops, E
00386	Perfect Cubes	3.2d, Three+ Nested Loops, H
10660	Citizen attention offices	3.2d, Three+ Nested Loops, H
11236	Grocery store	3.2d, Three+ Nested Loops, H
11804	Argentina Argentina	3.2d, Three+ Nested Loops, H
calculatingdartscores	<u>calculatingdartscores</u>	3.2d, Three+ Nested Loops, H
lektira	<u>lektira</u>	3.2d, Three+ Nested Loops, H
tautology	<u>tautology</u>	3.2d, Three+ Nested Loops, H
00188	Perfect Hash	3.2g, Try All Answers
00725	Division Division	3.2g, Try All Answers
10908	Largest Square	3.2g, Try All Answers
communication	<u>communication</u>	3.2g, Try All Answers
flexible	<u>flexible</u>	3.2g, Try All Answers
islands	<u>islands</u>	3.2g, Try All Answers
walls	<u>walls</u>	3.2g, Try All Answers

Both OJ	Problem Title	CP4
00382	Perfection	3.2h, Math Simulation, Easier
01225	Digit Counting	3.2h, Math Simulation, Easier
10346	Peter's Smokes	3.2h, Math Simulation, Easier
easiest	<u>easiest</u>	3.2h, Math Simulation, Easier
growlinggears	<u>growlinggears</u>	3.2h, Math Simulation, Easier
trollhunt	<u>trollhunt</u>	3.2h, Math Simulation, Easier
videospeedup	<u>videospeedup</u>	3.2h, Math Simulation, Easier
00616	Coconuts, Revisited	3.2i, Math Simulation, Harder
11130	Billiard bounces	3.2i, Math Simulation, Harder
11254	Consecutive Integers	3.2i, Math Simulation, Harder
11490	Just Another Problem	3.2i, Math Simulation, Harder
crackingrsa	<u>crackingrsa</u>	3.2i, Math Simulation, Harder
falling	<u>falling</u>	3.2i, Math Simulation, Harder
thanosthehero	<u>thanosthehero</u>	3.2i, Math Simulation, Harder
00729	The Hamming Distance Probl	3.2k, Backtracking (Easier)
10344	23 out of 5	3.2k, Backtracking (Easier)
10576	Y2K Accounting Bug	3.2k, Backtracking (Easier)
12840	The Archery Puzzle	3.2k, Backtracking (Easier)
goodmorning	<u>goodmorning</u>	3.2k, Backtracking (Easier)
natjecanje	<u>natjecanje</u>	3.2k, Backtracking (Easier)
paintings	<u>paintings</u>	3.2k, Backtracking (Easier)
00208	Firetruck Online Judge	3.2l, Backtracking (Harder)
00222	Budget Travel	3.2l, Backtracking (Harder)
00307	online Judge Sticks	3.2l, Backtracking (Harder)

Both OJ	Problem Title	CP4
01262	Online Judge Password	3.2l, Backtracking (Harder)
dobra	<u>Mobra</u>	3.2l, Backtracking (Harder)
fruitbaskets	<u>fruitbaskets</u>	3.2l, Backtracking (Harder)
pagelayout	<u>pagelayout</u>	3.2l, Backtracking (Harder)
11057	Childre Judge Exact Sum	3.3a, Binary Search
11621	Small Factors	3.3a, Binary Search
12192	Grapevine Grapevine	3.3a, Binary Search
12965	Angry Bids	3.3a, Binary Search
firefly	<u>Firefly</u>	3.3a, Binary Search
outofsorts	outofsorts outofsorts	3.3a, Binary Search
roompainting	<u>roompainting</u>	3.3a, Binary Search
12032	The Monkey and the Oiled B	3.3b, Bisection and BSTA, E
12190	College Sulfage Electric Bill	3.3b, Bisection and BSTA, E
13142	Destroy the Moon to Save t	3.3b, Bisection and BSTA, E
carefulascent	<u>carefulascent</u>	3.3b, Bisection and BSTA, E
freeweights	<u>freeweights</u>	3.3b, Bisection and BSTA, E
monk	<u>monk</u>	3.3b, Bisection and BSTA, E
suspensionbridges	<u>suspensionbridges</u>	3.3b, Bisection and BSTA, E
00183	Dilling Judge Bit Maps	3.3c, Ternary Search & Others
10385	Duathlon	3.3c, Ternary Search & Others
11147	Conline Judge KuPellaKeS BST	3.3c, Ternary Search & Others
12893	Count It	3.3c, Ternary Search & Others
a1paper	<u>a1paper</u>	3.3c, Ternary Search & Others
ceiling	<u>ceiling</u>	3.3c, Ternary Search & Others

Both OJ	Problem Title	CP4
goingtoseed	goingtoseed	3.3c, Ternary Search & Others
01193	Radar Installation	3.4a, Greedy (Classical)
10020	Minimal coverage	3.4a, Greedy (Classical)
11264	Coin Collector	3.4a, Greedy (Classical)
12321	Gas Stations	3.4a, Greedy (Classical)
classrooms	<u>classrooms</u>	3.4a, Greedy (Classical)
froshweek2	froshweek2	3.4a, Greedy (Classical)
squarepegs	<u>squarepegs</u>	3.4a, Greedy (Classical)
11369	Shopaholic Shopaholic	3.4b, Involving Sorting, E
11729	Commando War	3.4b, Involving Sorting, E
11900	Boiled Eggs	3.4b, Involving Sorting, E
13109	Elephants	3.4b, Involving Sorting, E
icpcteamselection	<u>icpcteamselection</u>	3.4b, Involving Sorting, E
minimumscalar	<u>minimumscalar</u>	3.4b, Involving Sorting, E
shopaholic	<u>shopaholic</u>	3.4b, Involving Sorting, E
01153	Keep the Customer Satisfie	3.4d, Involving PQ
10954	Online Judge Add All	3.4d, Involving PQ
13177	Orchestral scores	3.4d, Involving PQ
ballotboxes	<u>ballotboxes</u>	3.4d, Involving PQ
canvas	<u>canvas</u>	3.4d, Involving PQ
vegetables	<u>vegetables</u>	3.4d, Involving PQ
workstations	<u>workstations</u>	3.4d, Involving PQ
10340	Online Judge All in All	3.4e, Non Classical, Easier
10656	Maximum Sum (II)	3.4e, Non Classical, Easier

Both OJ	Problem Title	CP4
11520	Fill the Square	3.4e, Non Classical, Easier
12482	Short Story Competition	3.4e, Non Classical, Easier
ants	<u>ants</u>	3.4e, Non Classical, Easier
bank	<u>Sank</u>	3.4e, Non Classical, Easier
marblestree	<u>marblestree</u>	3.4e, Non Classical, Easier
00787	Maximum Sub-sequence Produ	3.5a, Max 1D/2D Range Sum
01105	Coffee Central	3.5a, Max 1D/2D Range Sum
10684	The jackpot	3.5a, Max 1D/2D Range Sum
10755	Garbage Heap	3.5a, Max 1D/2D Range Sum
commercials	<u>commercials</u>	3.5a, Max 1D/2D Range Sum
prozor	<u>prozor</u>	3.5a, Max 1D/2D Range Sum
sellingspatulas	<u>sellingspatulas</u>	3.5a, Max 1D/2D Range Sum
00481	What Goes Up	3.5b, LIS
01196	Tiling Up Blocks	3.5b, LIS
10534	Wavio Sequence	3.5b, LIS
11790	Murcia's Skyline	3.5b, LIS
increasingsubsequence	<u>increasingsubsequence</u>	3.5b, LIS
nesteddolls	<u>nesteddolls</u>	3.5b, LIS
trainsorting	<u>trainsorting</u>	3.5b, LIS
01213	Sum of Different Primes	3.5c, 0-1 KNAPSACK
10130	SuperSale	3.5c, 0-1 KNAPSACK
11566	Let's Yum Cha!	3.5c, 0-1 KNAPSACK
11832	Account Book	3.5c, 0-1 KNAPSACK
knapsack	<u>knapsack</u>	3.5c, 0-1 KNAPSACK

Both OJ	Problem Title	CP4
orders	orders orders	3.5c, 0-1 KNAPSACK
presidentialelections	presidentialelections	3.5c, 0-1 KNAPSACK
00242	Stamps and Envelope Size	3.5d, COIN-CHANGE
00674	Coin Change	3.5d, COIN-CHANGE
10448	Unique World	3.5d, COIN-CHANGE
11259	Coin Changing Again	3.5d, COIN-CHANGE
bagoftiles	<u> bagoftiles</u>	3.5d, COIN-CHANGE
canonical	<u>sanonical</u>	3.5d, COIN-CHANGE
exactchange2	exactchange2	3.5d, COIN-CHANGE
00216	Getting in Line	3.5e, TSP
11795	Mega Man's Mission	3.5e, TSP
12841	In Puzzleland (III)	3.5e, TSP
beepers	<u>beepers</u>	3.5e, TSP
bustour	<u>Sea bustour</u>	3.5e, TSP
cycleseasy	<u>cycleseasy</u>	3.5e, TSP
errands	<u>errands</u>	3.5e, TSP
10003	Cutting Sticks	3.5f, DP level 1
10912	Simple Minded Hashing	3.5f, DP level 1
11420	Chest of Drawers	3.5f, DP level 1
13141	Growing Trees	3.5f, DP level 1
nikola	<u> nikola</u>	3.5f, DP level 1
spiderman	<u>spiderman</u>	3.5f, DP level 1
ticketpricing	<u>ticketpricing</u>	3.5f, DP level 1
11228	Transportation system.	4.3a, MST, Standard

Both OJ	Problem Title	CP4
11631	Dark roads	4.3a, MST, Standard
11747	Heavy Cycle Edges	4.3a, MST, Standard
cats	<u>cats</u>	4.3a, MST, Standard
islandhopping	<u>islandhopping</u>	4.3a, MST, Standard
lostmap	<u> lostmap</u>	4.3a, MST, Standard
minspantree	<u>minspantree</u>	4.3a, MST, Standard
01013	Island Hopping	4.3b, MST, Variants
01265	Tour Belt	4.3b, MST, Variants
10048	Audiophobia	4.3b, MST, Variants
10457	Magic Car	4.3b, MST, Variants
millionairemadness	<u>millionairemadness</u>	4.3b, MST, Variants
muddyhike	<u>muddyhike</u>	4.3b, MST, Variants
naturereserve	<u>maturereserve</u>	4.3b, MST, Variants
00336	A Node Too Far	4.4a, SSSP, BFS, Easier
00429	Word Transformation	4.4a, SSSP, BFS, Easier
10653	Bombs! NO they are Mines!!	4.4a, SSSP, BFS, Easier
12160	Unlock the Lock	4.4a, SSSP, BFS, Easier
buttonbashing	<u>buttonbashing</u>	4.4a, SSSP, BFS, Easier
grid	<u> </u>	4.4a, SSSP, BFS, Easier
horror	<u>horror</u>	4.4a, SSSP, BFS, Easier
11352	Crazy King	4.4b, SSSP, BFS, Harder
11792	Krochanska is Here!	4.4b, SSSP, BFS, Harder
12826	Incomplete Chessboard	4.4b, SSSP, BFS, Harder
fire2	<u>fire2</u>	4.4b, SSSP, BFS, Harder

Both OJ	Problem Title	CP4
lost	<u>lost</u>	4.4b, SSSP, BFS, Harder
mallmania	<u> mallmania</u>	4.4b, SSSP, BFS, Harder
oceancurrents	oceancurrents oceancurrents	4.4b, SSSP, BFS, Harder
00439	Knight Moves	4.4c, Knight Moves
00633	A Chess Knight	4.4c, Knight Moves
10426	Knights' Nightmare	4.4c, Knight Moves
10477	The Hybrid Knight	4.4c, Knight Moves
grasshopper	grasshopper	4.4c, Knight Moves
hidingplaces	<u>hidingplaces</u>	4.4c, Knight Moves
01112	Mice and Maze	4.4d, SSSP, Dijkstra, Easier
10986	Sending email	4.4d, SSSP, Dijkstra, Easier
13127	Bank Robbery	4.4d, SSSP, Dijkstra, Easier
flowerytrails	<u>flowerytrails</u>	4.4d, SSSP, Dijkstra, Easier
shortestpath1	<u>shortestpath1</u>	4.4d, SSSP, Dijkstra, Easier
shortestpath2	<u>shortestpath2</u>	4.4d, SSSP, Dijkstra, Easier
texassummers	<u>texassummers</u>	4.4d, SSSP, Dijkstra, Easier
00589	Pushing Boxes	4.4e, SSSP, Dijkstra, Harder
12047	Highest Paid Toll	4.4e, SSSP, Dijkstra, Harder
12950	Even Obsession	4.4e, SSSP, Dijkstra, Harder
blockcrusher	<u>blockcrusher</u>	4.4e, SSSP, Dijkstra, Harder
emptyingbaltic	<u>emptyingbaltic</u>	4.4e, SSSP, Dijkstra, Harder
invasion	<u>invasion</u>	4.4e, SSSP, Dijkstra, Harder
visualgo	<u>visualgo</u>	4.4e, SSSP, Dijkstra, Harder
00558	Wormholes Wormholes	4.4f, SSSP, -ve weight

Both OJ	Problem Title	CP4
10449	Online Judge Traffic	4.4f, SSSP, -ve weight
11280	Flying to Fredericton	4.4f, SSSP, -ve weight
12768	Inspired Procrastination	4.4f, SSSP, -ve weight
hauntedgraveyard	<u> hauntedgraveyard</u>	4.4f, SSSP, -ve weight
shortestpath3	shortestpath3	4.4f, SSSP, -ve weight
xyzzy	<u>×yzzy</u>	4.4f, SSSP, -ve weight
00821	Page Hopping	4.5a, APSP, Standard
01247	Interstar Transport	4.5a, APSP, Standard
10354	Avoiding Your Boss	4.5a, APSP, Standard
11463	Commandos Commandos	4.5a, APSP, Standard
allpairspath	allpairspath	4.5a, APSP, Standard
importspaghetti	<u>importspaghetti</u>	4.5a, APSP, Standard
transportationplanning	<u>transportationplanning</u>	4.5a, APSP, Standard
00869	Airline Comparison	4.5b, APSP, Variants
01056	Degrees of Separation	4.5b, APSP, Variants
10342	Online Judge Always Late	4.5b, APSP, Variants
10987	Online Judge Antifloyd	4.5b, APSP, Variants
arbitrage	<u>arbitrage</u>	4.5b, APSP, Variants
kastenlauf	<u>kastenlauf</u>	4.5b, APSP, Variants
secretchamber	<u>secretchamber</u>	4.5b, APSP, Variants
00495	Fibonacci Freeze	5.4a, Fibonacci Numbers
00763	Fibinary Numbers	5.4a, Fibonacci Numbers
10334	Ray Through Glasses	5.4a, Fibonacci Numbers
10689	Yet another Number Sequenc	5.4a, Fibonacci Numbers

Both OJ	Problem Title	CP4
anti11	anti11	5.4a, Fibonacci Numbers
batmanacci	<u>batmanacci</u>	5.4a, Fibonacci Numbers
rijeci	<u>rijeci</u>	5.4a, Fibonacci Numbers
00369	Combinations Combinations	5.4b, Binomial Coefficients
10541	Office Judge Stripe	5.4b, Binomial Coefficients
11955	Binomial Theorem	5.4b, Binomial Coefficients
12712	Pattern Locker	5.4b, Binomial Coefficients
election	election	5.4b, Binomial Coefficients
lockedtreasure	<u>lockedtreasure</u>	5.4b, Binomial Coefficients
oddbinom	<u>oddbinom</u>	5.4b, Binomial Coefficients
00455	Periodic Strings	6.4a, String Matching
01449	Dominating Patterns Online Judge	6.4a, String Matching
11837	Musical Plagiarism	6.4a, String Matching
geneticsearch	geneticsearch	6.4a, String Matching
powerstrings	powerstrings	6.4a, String Matching
quiteaproblem	<u>quiteaproblem</u>	6.4a, String Matching
scrollingsign	<u>scrollingsign</u>	6.4a, String Matching
01254	Top 10	6.5a, Suffix Trie/Tree/Array
01584	Circular Sequence	6.5a, Suffix Trie/Tree/Array
11512	GATTACA Online Judge	6.5a, Suffix Trie/Tree/Array
automatictrading	<u>automatictrading</u>	6.5a, Suffix Trie/Tree/Array
buzzwords	<u>buzzwords</u>	6.5a, Suffix Trie/Tree/Array
suffixarrayreconstruction	<u>suffixarrayreconstruction</u>	6.5a, Suffix Trie/Tree/Array
suffixsorting	<u>suffixsorting</u>	6.5a, Suffix Trie/Tree/Array

Both OJ	Problem Title	CP4
00634	Polygon	7.3a, Polygon, Easier
11447	Reservoir logs	7.3a, Polygon, Easier
11473	Campus Roads	7.3a, Polygon, Easier
convexhull	<u>convexhull</u>	7.3a, Polygon, Easier
convexpolygonarea	<u>convexpolygonarea</u>	7.3a, Polygon, Easier
cuttingcorners	<u>cuttingcorners</u>	7.3a, Polygon, Easier
robotprotection	<u>robotprotection</u>	7.3a, Polygon, Easier
01600	Patrol Robot	8.2b, State-Space, BFS, E
10047	The Monocycle	8.2b, State-Space, BFS, E
11513	9 Puzzle	8.2b, State-Space, BFS, E
12135	Switch Bulbs	8.2b, State-Space, BFS, E
ecoins	ecoins	8.2b, State-Space, BFS, E
flipfive	<u> flipfive</u>	8.2b, State-Space, BFS, E
safe	<u>safe</u>	8.2b, State-Space, BFS, E
00658	It's not a Bug, it's a Fea	8.2d, State-Space, Dijkstra
01048	Low Cost Air Travel	8.2d, State-Space, Dijkstra
01057	Routing.	8.2d, State-Space, Dijkstra
10269	Adventure of Super Mario	8.2d, State-Space, Dijkstra
bumped	<u>bumped</u>	8.2d, State-Space, Dijkstra
destinationunknown	<u>destinationunknown</u>	8.2d, State-Space, Dijkstra
00989	Online Judge Su Doku	8.6a, NP-hard/C, small, E
11088	End up with More Teams	8.6a, NP-hard/C, small, E
12455	Online Judge Bars	8.6a, NP-hard/C, small, E
equalsumseasy	<u>equalsumseasy</u>	8.6a, NP-hard/C, small, E

Both OJ	Problem Title		CP4
flowfree	flowfree		8.6a, NP-hard/C, small, E
font	Sont		8.6a, NP-hard/C, small, E
socialadvertising	socialadvertising		8.6a, NP-hard/C, small, E
01347	Tour		8.6c, NP-hard/C, special, E
10859	Placing Lampposts		8.6c, NP-hard/C, special, E
11159	Factors and Multiples		8.6c, NP-hard/C, special, E
11357	Ensuring Truth		8.6c, NP-hard/C, special, E
bilateral	<u>bilateral</u>		8.6c, NP-hard/C, special, E
europeantrip	<u>europeantrip</u>		8.6c, NP-hard/C, special, E
reactivity	<u>reactivity</u>		8.6c, NP-hard/C, special, E
10245	The Closest Pair Problem		9.clos, Closest Pair
11378	Bey Battle		9.clos, Closest Pair
closestpair1	<u>closestpair1</u>		9.clos, Closest Pair
Showing 1 to 302 of 302 entries		First	Previous 1 Next Last

Buy Now!

Partner Links

VisuAlgo uHunt Kattis UVa

© 2000-2021 Steven Halim

Share this page in Facebook