



		This google sheet is created by Dr Mostafa Saad Ibrahim . Overall ~950 problems for newcomers to problem solving.					
		mostafa.saad.fc@gmail.com		Ask fm	Site / More Contacts		
		Video introducing roadmap (Arabic) - to min 18 ONLY			Video explaining the sheet		
		Currenet Version V7.0		Latest Version			

	Don't let a problem consumes more than 2-3 hours. If can't solve it, see editorials/solutions. If still can't solve it, just leave it for now.				
	Don't compare yourself with others. People vary in their progress				
Problem Level Column	Use the following guide to assign a proper problem level				
	Div2-A => 1 - 2 Div2-B => 1.5 - 3 Div2-C => 3 - 5.5 Div2-D => 5 - 6.5 Div2-E => 6 - 7.5 D1-D => 7 - 8.5 D1-E => 8 - 9.5				
	In other words, most of the time, one shouldn't assign Div2-A problem level such as 5. But it can be: 1, 1.5, 2. Very few might be 2.5				
Notations	CF136-D2-A	CF (codeforces), D2 (Division 2), (136, A) is the problem URL. Note this is not Round 136 ... it is Round 97			
	SRM150-D2-1000	SRM 150 (Topcoder), D2 (Division 2), 1000 (3rd problem)			
	For Topcoder:				
	If using the applet arena, then we normally use SRM number (the old way) However, if using the web arena, you need first the problem name itself! (the new way - https://arena.topcoder.com/) The fastest way to get problem name is from the editorial if exist https://apps.topcoder.com/wiki/display/tc/Algorithm+Problem+Set+Analysis [LOGIN here first] https://www.topcoder.com/tc?d1=match_editorials&d2=archive&module=Static https://www.topcoder.com/blog/tag/srm-editorials/ [for recent SRMs] How to see contest submissions: https://www.quora.com/Where-can-I-find-the-solutions-to-the-problems-in-TopCoder Otherwise from match archive: https://www.topcoder.com/tc?module=MatchList For notes and tricks for using Java arena applet: See https://goo.gl/Q43tRL . We can download code with all cases on local machine and code normally. Topcoder nowadays maybe slow. So wait for 5 min for a problem to open. If did not work, try in another day https://codeforces.com/blog/entry/61252				
Problems Colors	CF483-D2-A	White for a problem from codeforces			
	UVA 10242	Basic (if possible) Knowledge problem on the just watched videos			
	SPOJ CDOWN	A knowledge problem on topic you watched before, will be harder than basic problems			
	CF318-D2-B	Problem of easier level than current sheet page level to enhance multiple training levels in same time instead of 1 level training			
Moving faster	Do I have to solve every problem? For Div2 (A, B, C1) => No. If you can move faster, do it. For Non CF problems (E.g. UVA), please solve all				
Others Solutions	If you solved a problem, please see some other accepted solutions in codeforces. You don't need to watch my linked videos unless can't solve				
External Resources	Awesome Competitive Programming	Many awesome links - very helpful for English guys			
	Ahmed Elsaghir Trainnig	Ahmed is senior from GUC			
	A2oj Ladders	Don't like my sheet? Go with Ahmed Aly Ladders			
	Prgramming Ahmed M sayd	Arabic Programming Playlist			
	Programming Mohamed desouky	Arabic Programming Playlist			
	More Resources	Each video is part of a playlist			
History	V1: Initial release				
	V2: Vidoes updates. Sheet P2A: Little problems replaced + reordering. P2B, P2C. P2D merged in P2B. P3A and P3B: new knowledge sheets				
	V3: Added problem names. P3A, P3B split over 3 sheets. reordered to be more incremental rather than random				
	V4: (https://docs.google.com/spreadsheets/d/12YI86X40xGtid9t1dUHhKK6urqh6nTaPEvOKBkAbAgU/edit?usp=sharing) Solving many knowledge concerns: 1- Discarded rare topics (and their problems): ~20 videos. 2- Adding Easy problems after each video. You don't have to search by yourself anymore 3- Distributing many of the knowledge problems inside the the main sheets instead of delaying them to the last sheets. Other concerns: 4- More smooth transitions from a sheet to another 5- Utilizing the new many problems added by CF since initial sheet creation				
	V5				
	- Added Video Solutions to some existing problems - Added Easier DP problems after its Intro videos - Added new topics: Tree Diameter, Isomorphism, DP (bitmasks, games, probability), Max Flow, SCC, Segment Tree, 2 pointers, Trie, KMP, Geometry Polygons - Added problems for old categories to balance the available problem levels per category. - Added 3 sheets for Div2-D (contains the old Misc sheet problems)				
	Note: If you were using version 4.X, then the major change for you is replacing "Misc" sheet with the 3 Div2-D sheets. If wanna migrate:				
	- Then Remove Misc sheet				
	- Click on the arrow for Div2-D sheets, and make copy for your sheet				

V6:
- Added 3 columns to the sheet: debug time, category and by yourself columns
- Each sheet is enhanced with problems from the lower sheet (shifted from it). The purpose is to mix levels per sheet, hence allow multiple training levels in same time (hard vs speed concern). See the new added color
- Added probability/expectations English videos/problems
- Added Topological sort problems
- Solution editorials linked to many non-CF problems / more videos in Div2-A/Div2-B
- Add many problems where my trainees marked as interesting problems. Removed some problems that I think not that interesting or its ideas covered by other problems (subjective). I am working on sheets with a simple, but hard to do idea: Most of the problems seems for the trainer novel in idea with less repeated ideas, hence learning a lot while solving much less.
- Add topics based training style sheet page

V7:
- Added Topics2 (See notes there) - not intended for juniors

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If you are working in some sheet, find the convenient point to switch. E.g. if you are in middle of sheet, finish it and move to new sheet page from next one. Say you are in middle C1. Finish it first. Then remove C2, D1, D2, D3. In the new version, click a sheet page and select Copy To, then copy to your sheet. In other words, **migration** should be 5-min process. If need more, you are doing it wrongly.

Thanks for all guys who sent sheet feedback: Mariam Alshereef, Magdy Hassan, Ahmed Yasser, Ahmed Elsayed Awad, Mohamed Nasser, Mostafa Ali Mansour, Aya elymany, Ayyad shenouda, Others.

Special Thanks for Coach Alhussain Aly for his continuous help

Special Thanks for All volunteers in videos recording / Editorials writing

Q) What is the sheet requirements? Should I study algorithms and Data structures?

- ONLY programming skills (e.g. Programming 1 level). It is highly advised to implement 2-3 projects
- NO for OOP
- NO for datastructures, but learn STL (or Collections in Java/C#). It helps alot
- NO for algorithms, the sheet will teach you that in a smooth way
- For C++ guys (and others as guide) - first 18 videos here: <https://www.youtube.com/playlist?list=PLPt2dINi2MIZPFq6HyUB1Uhxhdh1UDnZMS>

Q) How much time do I need to finish the sheet?

- Answer varies from one to another.
 - Some trainees are fast through whole sheet
 - Some trainees are slow through whole sheet
 - Some trainees are fast in early pages, but slow at the end
 - Some trainees are slow in early pages, but fast at the end
- The sheet has ~900 problems. Around 60 videos. Problems targets average guys. However, you are encouraged to skip problems whenever you could. I expect many guys could skip 20%-30% of the mandatory problems. Make use of the Topics page.

215 problems of level ≤ 2.5 (avg 20 min per problem)
93 problems of level ≤ 3.5 (avg 30 min per problem)
270 problems of level ≤ 4.5 (avg 40 min per problem)
178 problems of level ≤ 5.25 (avg 60 min per problem)
127 problems of level ≤ 5.75 (avg 75 min per problem)
53 problems of level > 5.75 (avg 90 min per problem)

$215 \cdot 20 + 93 \cdot 30 + 270 \cdot 40 + 178 \cdot 60 + 127 \cdot 75 + 53 \cdot 90 = \sim 700$ hours (say max 900 hours)

If you trained in the summer vacation seriously for 2 month (e.g. 10 hours * 30 days * 2 month = 600 hours) + the reamining of the year effort, you could solve the whole sheet smoothly and move to Div2-E level goal

- <https://ask.fm/mostafasaad87/answers/144907000290> [adjust to whatever fits with you]

Q) When should I give up and check the editorials and solutions?

<https://ask.fm/mostafasaad87/answers/144907000290>

Q) Got WA, should I check directly the test cases?

- No, remember in a real contest you only know your problem status (WA, TLE, ...etc)
- Struggle to find the wrong case by yourself. At least 15-30 minutes.
- Don't keep trying longer, just check the test cases
- If you can write a brute force solution for your problem, write a stress test: Generate random cases and compare the optimal algorithm with the brute force case

Q) What is the debug time?

- Once you finish coding and start testing, you verify if the program is working as expected or not
- If not, there are bugs that you need to find to make the program behave as expected. From this moment till getting the program AC = debugging time
- People could debug using 'print statements'. A better way using a debugger
- Check out these 4 videos: <https://www.youtube.com/watch?v=DlbQwQEIDW0&list=PLPt2dINi2MIZPFq6HyUB1Uhxhdh1UDnZMS>

Q) Should I solve every problem?

- Generally, preferred, but if you think certain level is easy (e.g. solve it within 15 minutes), then jump a block and so on
- This jumping might be for codeforces problems only

Q) Just started in Div2-A, could I finish its codeforces problems first, then solve the UVA/Colored problems?

- Many juniors find UVA problems in Div2-A hard, I understand
- Yes, almost same for Div2-B. But don't do that in next sheets as order might matter, because all of such knowledge are mainly preparations for hard Div2-B or Div2-C
- However, following the order is a much better idea
- Similarly, one could finish All Div2-A/Div2-B codeforces problems, then solve their colored problems. Again, this is not the best way.

Q) Is using C# ok?

- Generally yes, but you won't be able to submit in UVA judge, as C# is not supported
- For such problems, write your code, but heavily test it. You may download an internet code and evaluate the test case on both
- On the other hand, learning Basic C++ + STL is not hard for C#/Java guys
- C++/Java/Python are official in UVA
- Codeforces allows more such as Javascript

Q) When I watch a video, should I solve the problems in its info section?

- No, sheet has subset of these problems already in specific order
- Sheet is self-contained

Q) I watched the video, but it is hard, any tips?

- Algorithms are hard, learn to struggle
- Watch the video 2-3 times, try to rewrite its code by yourself
- Still can't get it? Google for more materials from the web (ppt/pdf/videos) and try to learn
- In worst case, leave it for now and return to it later

Q) How does your sheet prepare for ECPC/ACPC?

- The sheet prepares you to reach level 5-5.5/10 in several categories
- If a team of 3 members solved the whole sheet, they may rank in the top 15 in the contest

But let's go in details. Individual success in contests depends on several factors. Let me state some of them.

- Solving many problems of good quality
- Improving your different skills (reading, thinking, coding and accuracy).
- 2 persons could solve in training the same problem. One got it in 20 min first submission, and the 2nd needed 90 minutes due to 60 minutes debugging.
- Healthy training: Regular / good times for training (e.g. morning) / weekly contests / reading other codes / collaboration with others / etc
- Stress management during contests
- Emotions management when fail in solving or feel performance is not improving enough
- Avoiding Psychological issues: Comparing to others, Negative feelings, Your image, Regretting training time

Moving toward a team contest, you need more concerns:

- Serious team members. If only one active member, they may end up in bad performance. So EACH team member need to finish the sheet individually + weekly contests
- Tolerating team mistakes during the contest
- PC management
- Suitable strategy + several team contests to tune it

As you may notice, there are MANY factors for success.

- This sheet provides you with high quality problems and good topics distribution + way to record your stats to know your weak points
- However, there are many concerns that YOU have to tackle by yourself and your team members

- Finish up to CF-C2 sheet, then study from the "Cracking the Coding Interview: 150 Programming Questions and Solutions" book
- Also watch: <https://www.youtube.com/watch?v=39vqarATPyM>

Q) How different is your sheet versus **Ahmed Aly Ladders**?

- Ladder problems are selected automatically, no personal investigation for the actual benefit/need from the problem
- Mine is mixed between automated and manual.
- At the current moments, many of my trainees and students feedback, I am aware of the problem level and its category.
- I updated the sheet many times because of the received feedback
- My sheet involves the algorithms videos to learn, in order, while you grow up.
- I selected videos to prepare you as soon as possible for Div2-C/Div2-D where many algorithms starts to appear
- It is a sheet..ready for you to record your times, notes...etc...this help to improve yourself
- It is not blocking style. If you can't solve problem, just leave it and move to other one. In ladders, you see next problem when solve current one (or do workarounds)

Q) How did you **select problems** for the sheet?

- Long story, many versions were there, from a version to another improvements were applied
- Codeforces problems where rated based on this CF tool: http://codeforces.com/blog/entry/46304?mobile=true#_=_
- Any rating is just an estimation. I found this one a pretty reasonable measure
- The videos are selected such that when comes to Div2-C/, you are ready
- Manual selections and investigations for non-CF problems to be used in the sheet
- Lots of manual efforts and investigations and feedback processing

Q) what is the next step **after finishing** your sheet ?

- Joining directly my ICPC semi-seniors supervision, **BUT**
- Email me with your online sheet copy link and it **must** have
- Each row should have: code link, time details, problem level, category and comment per a problem
- I will review and decide
- Side note: If you started in Div2-C1 and solved first 15 problems, you can share the sheet with me to follow your updates

Q) can't **access** the sheet in **edit** mode?

- Don't download the sheet, Work over it online "better"
- Can't edit it? Because it is read-only. Read below notes.
- Just make a copy to your google driver
- Then work over it online. Following are the details

- Login to ur google Gmail
- Go to my sheet
- In the sheet click on 'file' menu
- select Make copy
- it will create copy for u
- RENAME it to Junior Training Sheet
- Now the copied sheet is opened for you (or go inside ur Google drive and you will find it)

NOTE: If u did so and still read-only format, then you are again opening my sheet (e.g. with old name), NOT your copy

Q) What to write in the **category** column?

The algorithm used to solve a problem. In Div2-A, this might be:

- This column is for the algorithm you used during solving. Usually, new guys in CF-A are confused. If so, leave it CF-A and start to write in CF-B
- The more you go in the sheet you will learn algorithms (e.g. Binary search, DP, DFS, etc). Then this what you write in level column
- The problem that has no algorithm but a specific idea called ad-hoc, This is the case for most of CF-A and less later
- Implementation: Means the problem request is almost direct, just code it
- Brute Force: Means instead of finding elegant solution, try all possible solutions (e.g. 3 nested loops) and select the solution
- Ad-hoc: Just per-problem thinking in a special way/analysis on how to solve the problem
- Please watch from this minute: <https://youtu.be/DZ6YTtLCE8?t=839>

Q) Are problems really sorted based on **easiness**? I don't feel so.

They are sorted by easiness already. But, whatever order, anyone will find some are easy and some are hard in some order.

That is, no one can give you a list that every problem for YOU is easier than the next problem.

In other words, If we gave 100 problems to 10 students of same level to solve and told them rank from easy to hard, they will rank them differently.

So, questions ordered by people average. The promise is, the problems will be within your range to solve.

Q) What are these problems **colors**?

See "Problems Colors" notes in info page

Q) Are the problems **sorted**?

Yes, but this is tricky as sorting is subjective.
That is imagine 10 problems given for 100 people to order based on its level, people will arrange in different ways based on their experience
So if you felt they are not sorted, just keep going

Q) Why problem-solving is that important?

See the first 2 videos here: <https://www.youtube.com/playlist?list=PLPt2dINI2MlaNcU070HIAO8JWYBcafuyG>

Q) I feel bored when solving problems compare to doing projects?

<https://ask.fm/mostafasaad87/answers/145333554402>

Q) I would like to freeze my study for 1-2 years to be good in problem-solving?

I never liked that. Graduate on time. In your free times and vacations do more problem solving
Relevant: <https://ask.fm/mostafasaad87/answers/145151822818>

Q) Topics based-training vs Blind Order

In topics training, we study a topic, then solve a lot of problems over it.

Advantages:

- Mastering the algorithm till solving some hard problems in short time

Disadvantages:

- Discovering the algorithm behind the problem is an important skill. Given that you know the topic, you lose a good space to improve this skill
- Being in the mode of specific algorithm lets you solve many of it easier. However, when solving in real contests, your mind is not so active on specific topic

In my sheets - Blind style:

- You solve 3-5 per topic. Then you have to discover the other problems by yourself. So you train to avoid the missing 2 points

Claim:

- Although topics training let guys be so good early, they level stuck early and they don't improve. Seems to me, topics training is an important factor in doing so. Meanwhile, if you just target to be good in Div2D level in shorter time and no interest in further competitions achievements, you may go topics based.

Q) Who Finished my sheet? Their levels?

<https://ask.fm/mostafasaad87/answers/150802497762>

Q) How to share my sheet progress with you?

<https://ask.fm/mostafasaad87/answers/148552940002>

Q) What is after the sheet?

- There are 2 other levels, each has around 1000 problems. Semi-senior level and seniors level
- Generally speaking, the region stars will solve a lot of problems, e.g. 2000-3000 problems with many of them of hard level
- Whoever finish the sheet, I join him in my supervision for the next levels

Problem Name	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
	AC Averages =>	3	2.3	5	13	15	18	50	2	2	2	2
Sample Name1	Sample Link1	AC	5	4	8	6	32	50	2	Yes	Math	Solution in mind is $O(n^2)$; for each pair of points, get the equation of the straight line linking between them, and add 2 to its count. Print the count of the line having the max count. Problem is how to hash a line equation (coefficients are double).
												My Performance Notes: This is so bad performance. Needed many submissions per problem. Always submit as if you are in real contest. Submit to AC, not to see if we will pass or not. Target AC from 1st submission. Think more before submission.
Sample Name2	Sample Link2	AC	1	5	10	35	20	70	2	No	Impl	I had to check the editorial
												My Performance Notes: This is so bad performance. He thought for little time and continued thinking while coding. As a result, much debug time too. RULE: Think More, Code Faster
Sample Name3	Sample Link3	AC	1	5	20	4	1	30	2	Yes	Graph	Please always write and study your timings.
												My Performance Notes: This is so good performance. 1st submission. Thinking is the higher. Code/Debug is so low. By time, thinking column will be improved.
Sample Name4	Sample Link4	WA	5	4	25	20	2	51	7	Hint	Math	Other Status values: AC, WA, CS, TLE, MLE, RTE, ...
Sample Name5	Sample Link5	CS	6	5	30	25	31	91	9			These values and comments are just examples. Just remove/ignore them.
												Want c++ solution for UVA 408? Google with: UVA 408 filetype:cpp
								0				
								0				Watch - Approaching Problem Statement.
								0				Watch - Thinking - On papers Not on PC.
Vanya and Fenn	CF677-D2-A							0				C++ Solution Example
Anton and Dani	CF734-D2-A							0				This is from Round 379. Here is the editorial
								0				<i>You shouldn't watch a solution video unless you can't solve it by yourself and don't get it from editorial/code. Videos are there just for extra help.</i>
								0				In the first 20 problems, don't think more than 20 minutes. After that see the solutions.
								0				
Bear and Big Brother	CF791-D2-A							0				Video Solution - Eng Youssef El Ghareeb
Team	CF231-D2-A							0				Video Solution - Eng Youssef Ali
Beautiful Matrix	CF263-D2-A							0				Video Solution - Eng Samed Hajajla
Gravity Flip	CF405-D2-A							0				Video Solution - Eng John Gamal
Petya and String	CF112-D2-A							0				Video Solution - Solver to be (Java)
Boy or Girl	CF236-D2-A							0				Video Solution - Solver to be (Java)
Word	CF59-D2-A							0				Video Solution - Solver to be (Java)
Magnets	CF344-D2-A							0				Video Solution - Solver to be (Java)
Sereja and Dima	CF381-D2-A							0				Video Solution - Solver to be (Java)
Stones on the Table	CF266-D2-A							0				Video Solution - Eng Ahmead Raafat (Python)
Police Recruits	CF427-D2-A							0				Video Solution - Eng Ahmead Raafat (Python)
Black Square	CF431-D2-A							0				Video Solution - Eng Ahmead Raafat (Python)
Night at the Museum	CF731-D2-A							0				Video Solution - Eng Yahia Ashraf
Games	CF268-D2-A							0				Video Solution - Eng Yahia Ashraf
								0				
								0				Watch - Measuring Algorithms Performance - 1
								0				Watch - Elementary Math - Introduction
Buy a Shovel	CF732-D2-A							0				Video Solution - Eng Yahia Ashraf
Is your horseshoe on the wall?	CF228-D2-A							0				Video Solution - Eng Ahmead Raafat (Python)
Colorful Stones	CF265-D2-A							0				Video Solution - Eng Ahmead Raafat (Python)
Die Roll	CF9-D2-A							0				Video Solution - Eng Muntaser Abukadeja
Shaass and Osh	CF294-D2-A							0				Video Solution - Dr Mostafa Saad
Juicer	CF709-D2-A							0				Video Solution - Solver to be (Java)
Carrot Cakes	CF799-D2-A							0				Video Solution - Solver to be (Java)
Anton and Letta	CF443-D2-A							0				Video Solution - Solver to be (Java)
Way Too Long	CF71-D2-A							0				Video Solution - Solver to be (Java)
Free Ice Cream	CF686-D2-A							0				Video Solution - Solver to be (Java)
Helpful Maths	CF339-D2-A							0				Video Solution - Solver to be (Java)
Team Olympiad	CF490-D2-A							0				Video Solution - Eng Muntaser Abukadeja
New Password	CF770-D2-A							0				
								0				
								0				Watch - Number Theory - Modular Arithmetic
								0				Watch - Combinatorics - Counting Principles
Light, more light	UVA 10110							0				Video Solution - Eng Amr Saud
Product	UVA 10106							0				Video Solution - Eng Youssef El Ghareeb. Don't solve using big integer
Uniform Generation	UVA 408							0				Video Solution - Eng Yahia Ashraf
Black and white	UVA 11231							0				Video Solution - Eng Amr Saud
	SPOJ EASYMATH							0				Sol
Electricity	UVA 12148							0				Learn Calender Leap Year
								0				
Presents	CF136-D2-A							0				Video Solution - Eng Ahmed Rafaat (Python)
Lineland Mail	CF567-D2-A							0				Video Solution - Eng Ahmed Rafaat (Python)
Mahmoud and Ezzat	CF766-D2-A							0				Video Solution - Solver to be (Java)
Snacktower	CF767-D2-A							0				
Oath of the Night	CF768-D2-A							0				Video Solution - Solver to be (Java)
Pangram	CF520-D2-A							0				Video Solution - Solver to be (Java)
Twins	CF160-D2-A							0				Video Solution - Solver to be (Java)
Keyboard	CF474-D2-A							0				Video Solution - Solver to be (Java)
								0				
								0				Watch - Graph Theory - Intro
								0				Watch - Graph Theory - DFS
The Seasonal Greetings	UVA 352							0				Video Solution - Eng Mohamed Nasser
Marcus	UVA 10452							0				Video Solution - Eng Ayman Salah
Battleships	UVA 11953							0				Video Solution - Eng Aya Elymany
								0				Read definition of: Bipartite graph
Forming Teams	CF216-D2-B							0				Video Solution - Dr Mostafa Saad
Hierarchy	SPOJ MAKETREK							0				Video Solution - Eng Yahia Ashraf
Ordering Tasks	UVA 10305							0				Video Solution - Eng Yahia Ashraf
								0				
Even Odds	CF318-D2-A							0				Video Solution - Eng Muntaser Abukadeja
I Wanna Be the Guy	CF469-D2-A							0				Video Solution - Solver to be (Java)
Is it rated?	CF807-D2-A							0				Video Solution - Solver to be (Java)

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AC Averages =>		3	2.3	5	13	15	18	50	2	2	2	2
Olesya and Roc	CF584-D2-A							0				Video Solution - Solver to be (Java)
Football	CF43-D2-A							0				Video Solution - Eng Belal Abdalnasser (Python)
Brain's Photos	CF707-D2-A							0				Video Solution - Solver to be (Java)
Dubstep	CF208-D2-A							0				Video Solution - Solver to be (Java)
Valera and X	CF404-D2-A							0				Video Solution - Solver to be (Java)
Arpa's hard exa	CF742-D2-A							0				Video Solution - Solver to be (Java)
Calculating Fun	CF486-D2-A							0				Video Solution - Solver to be (Java)
Theatre Square	CF1-D12-A							0				Video Solution - Solver to be (Java)
Anton and Poly	CF785-D2-A							0				Video Solution - Solver to be (Java)
Panoramix's Pr	CF80-D2-A							0				Video Solution - Solver to be (Java)
Counterexamp	CF483-D2-A							0				Video Solution - Solver to be (Java)
								0				
								0				Watch - Computational Geometry - Intro
								0				Watch - Computational Geometry - Point and Vector
Wasted Time	CF127-D2-A							0				
Points in Figure	UVA 476							0				
Overlapping Re	UVA 460							0				Video Solution - Eng Muntaser Abukadeja
Fancy Fence	CF270-D2-A							0				Video Solution - Eng Omar Ashraf
Pouring Rain	CF667-D2-A							0				
Fourth Point !!	UVA 10242							0				Video Solution - Eng Magdy Hasan
								0				
Good Number	CF365-D2-A							0				Video Solution - Eng Muntaser Abukadeja
Dice Tower	CF225-D2-A							0				Video Solution - Eng Muntaser Abukadeja
Alyona and Nun	CF682-D2-A							0				Video Solution - Eng John Gamal
Mountain Scene	CF218-D2-A							0				Video Solution - Eng John Gamal
Help Vasilisa th	CF143-D2-A							0				Video Solution - Eng John Gamal
Chewbacca anc	CF514-D2-A							0				Video Solution - Eng Muntaser Abukadeja
Ksenia and Pan	CF382-D2-A							0				Video Solution - Eng Samed Hajajla
Launch of Collic	CF699-D2-A							0				Video Solution - Eng Samed Hajajla
Polo the Pengui	CF289-D2-A							0				Video Solution - Dr Mostafa Saad
IQ Test	CF287-D2-A							0				Video Solution - Dr Mostafa Saad
Yaroslav and Pi	CF296-D2-A							0				Video Solution - Dr Mostafa Saad
Snow Footprints	CF298-D2-A							0				Video Solution - Dr Mostafa Saad
Raising Bacteri	CF579-D2-A							0				Video Solution - Eng Ahmed Rafaat (Python)
BowWow and th	CF1204-D2-A							0				Video Solution - Dr Mostafa Saad
Balanced Rating	CF1237-D12-A							0				
								0				
								0				Watch - Search Techniques - Binary Search
The Playboy Ch	UVA 10611							0				Video Solution - Eng Ayman Salah
Pipeline	CF287-D2-B							0				Video Solution - Dr Mostafa Saad
Burning Midnight	CF165-D2-B							0				
Aggressive cow	SPOJ AGGRCOW							0				Video Solution - Eng Youssef El Ghareeb
									Before moving to another sheet, email me with feedback about these problems selection.			
									Optional Problems			
									0			You don't have to or encouraged to solve the next problem. If you felt you need so, try some of them. Or Proceed to next and solve in parallel, up to you.
Word Capitaliza	CF281-D2-A							0				Video Solution - Solver to be (Java)
Next Round	CF158-D12-A							0				Video Solution - Solver to be (Java)
Young Physicist	CF69-D2-A							0				Video Solution - Solver to be (Java)
Bit++	CF282-D2-A							0				Video Solution - Solver to be (Java)
Case of the Zen	CF556-D2-A							0				Video Solution - Solver to be (Java)
Translation	CF41-D2-A							0				Video Solution - Solver to be (Java)
String Task	CF118-D2-A							0				Video Solution - Solver to be (Java)
Laptops	CF456-D2-A							0				Video Solution - Solver to be (Java)
Left-handers, R	CF950-D2-A							0				Video Solution - Eng Hossam Yehia
George and Ac	CF467-D2-A							0				Video Solution - Eng Ahmed Rafaat (Python)
Vasya the Hipst	CF581-D2-A							0				
Fox And Snake	CF510-D2-A							0				
The New Year:	CF723-D2-A							0				
Elephant	CF617-D2-A							0				
Greg's Workout	CF255-D2-A							0				
Ultra-Fast Math	CF61-D2-A							0				
Little Pony and	CF454-D2-A							0				
One-dimension	CF721-D2-A							0				
Soldier and Ban	CF546-D2-A							0				
								0				
Bus to Udaylan	CF711-D2-A							0				
Cookies	CF129-D2-A							0				
Second Order S	CF22-D2-A							0				
Nearly Lucky Ni	CF110-D2-A							0				
Playing with Dic	CF378-D2-A							0				
A Good Contest	CF681-D2-A							0				
Beautiful Year	CF271-D2-A							0				
Far Relative's B	CF629-D2-A							0				
Mashmikh and	CF415-D2-A							0				
Triangular num	CF47-D2-A							0				
								0				
Roma and Luck	CF262-D2-A							0				
Toy Army	CF84-D2-A							0				
Levko and Tabl	CF361-D2-A							0				
Cards	CF701-D2-A							0				
Wizards' Duel	CF591-D2-A							0				
Combination Lo	CF540-D2-A							0				
Summer Camp	CF672-D2-A							0				
Soft Drinking	CF151-D2-A							0				
Coder	CF384-D2-A							0				

Problem Name	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
AC Averages =>		3	2.3	5	13	15	18	50	2	2	2	2
GukiZ and Cont	CF551-D2-A							0				
								0				
Circle Line	CF278-D2-A							0				
Patrick and Sho	CF599-D2-A							0				
Choosing Team	CF432-D2-A							0				
Vanya and Cub	CF492-D2-A							0				
Insomnia cure	CF148-D2-A							0				
Cakeminator	CF330-D2-A							0				
Flag	CF16-D2-A							0				
Cupboards	CF248-D2-A							0				
Soroban	CF363-D2-A							0				
								0				
Amusing Joke	CF141-D2-A							0				
Lights Out	CF275-D2-A							0				
Lunch Rush	CF276-D2-A							0				
Duff and Meat	CF588-D2-A							0				
Vanya and Caro	CF401-D2-A							0				
Squats	CF424-D2-A							0				
Arrival of the Ge	CF144-D2-A							0				
Sinking Ship	CF63-D2-A							0				
LLPS	CF202-D2-A							0				
Candy Bags	CF334-D2-A							0				
								0				
Game With Stic	CF451-D2-A							0				
Vasya and Sock	CF460-D2-A							0				
Dima and Frie	CF272-D2-A							0				
Nicholas and P	CF676-D2-A							0				
Toy Cars	CF545-D2-A							0				
DZY Loves Has	CF447-D2-A							0				
HQ9+	CF133-D2-A							0				
Holidays	CF670-D2-A							0				
Dividing Orange	CF244-D2-A							0				
Haiku	CF78-D2-A							0				
								0				
System of Equa	CF214-D2-A							0				
IQ test	CF25-D2-A							0				
Contest	CF501-D2-A							0				
Restoring Pass	CF94-D2-A							0				
Valera and Plat	CF369-D2-A							0				
Minimum Diffic	CF496-D2-A							0				
Little Elephant	CF221-D2-A							0				
Collecting Beats	CF373-D2-A							0				
Letter	CF14-D2-A							0				
Kefa and First	CF580-D2-A							0				
								0				
Ilya and Bank A	CF313-D2-A							0				
Uncowed Force	CF604-D2-A							0				
Reconnaissanc	CF34-D2-A							0				
Lucky Ticket	CF146-D2-A							0				
Chat room	CF58-D2-A							0				
George and Sle	CF387-D2-A							0				
Ostap and Gras	CF735-D2-A							0				
The number of	CF124-D2-A							0				
Table	CF359-D2-A							0				
Tavas and Nafa	CF535-D2-A							0				
								0				
Watermelon	CF4-D2-A							0				
Let's Watch Foc	CF195-D2-A							0				
Initial Bet	CF478-D2-A							0				
Saitama Destro	CF608-D2-A							0				
Queue on Bus	CF435-D2-A							0				
Bicycle Chain	CF215-D2-A							0				
Little Elephant	CF205-D2-A							0				
Amr and Music	CF507-D2-A							0				
Marks	CF152-D2-A							0				
Postcards and	CF137-D2-A							0				
								0				
Business trip	CF149-D2-A							0				
Drazil and Date	CF515-D2-A							0				
Multiplication	CF577-D2-A							0				
Exam	CF534-D2-A							0				
Alena's Schedu	CF586-D2-A							0				
Interview	CF631-D2-A							0				
Lucky Division	CF122-D2-A							0				
Appleman and	CF462-D2-A							0				
Vasya and Digit	CF355-D2-A							0				
Parallelepiped	CF224-D2-A							0				
								0				
Group of Studer	CF357-D2-A							0				
Joysticks	CF651-D2-A							0				
Array	CF300-D2-A							0				
Round House	CF659-D2-A							0				
Lala Land and	CF558-D2-A							0				
Autocomplete	CF53-D2-A							0				
Digital Counter	CF495-D2-A							0				
Vitaliy and Pie	CF525-D2-A							0				

Problem Name	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
AC Averages =>		3	2.3	5	13	15	18	50	2	2	2	
Life Without Zer	CF75-D2-A							0				

	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0
								0				Watch - Thinking - Problem Simplification
								0				Watch - Thinking - Brainstorm - Rank - Approach
								0				Study STL (You may study data structures if found hard)
								0				Watch - Combinatorics - Permutations and Combinations - 1
								0				Watch - Combinatorics - Permutations and Combinations - 2
Petya and Country	CF66-D2-B							0				Video Solution - Eng Muntaser Abukadeja
Bear and Finding C	CF680-D2-B							0				Video Solution - Eng Muntaser Abukadeja
Burglar and Match	CF16-D2-B							0				Video Solution - Eng Muntaser Abukadeja
Caisa and Pylons	CF463-D2-B							0				Video Solution - Eng Muntaser Abukadeja
Sum of Digits	CF102-D2-B							0				Video Solution - Eng Muntaser Abukadeja
Coins	CF47-D2-B							0				Video Solution - Eng Samed Hajajla
Effective Approach	CF227-D2-B							0				Video Solution - Eng Abanob Ashraf
Easter Eggs	CF78-D2-B							0				Video Solution - Eng Abanob Ashraf
Decoding	CF746-D2-B							0				Video Solution - Solver to be (Java)
								0				Watch - Training-Secrets of Success
								0				Revise Stack/Queue datastructure concepts. Learn using STL
								0				Watch - Number Theory - Fib. GCD. LCM. Pow
Big Mod	UVA 374							0				
Combinations	UVA 369							0				
Pi	UVA 412							0				Video Solution - Eng Mohamed Adel
Adding Reversed I	UVA 713							0				Don't use big integer class. Write simple array computations
Taxi	TIMUS 1607							0				Can you get AC first submission?
The Drunk Jailer	LIVEARCHIVE 2557							0				Find a formula
Vanya and Lantern	CF492-D2-B							0				Video Solution - Solver to be (Java)
								0				Watch - Prefix Sum
Kuriyama Mirai's S	CF433-D2-B							0				
Fence	CF363-D2-B							0				Video Solution - Eng Muntaser Abukadeja
President's Office	CF6-D2-B							0				Video Solution - Eng Muntaser Abukadeja
Lovely Palindrome	CF688-D2-B							0				Video Solution - Solver to be (Java)
Sort the Array	CF451-D2-B							0				Video Solution - Solver to be (Java)
Summer sell-off	CF810-D2-B							0				Video Solution - Solver to be (Java)
Colorful Field	CF79-D12-B							0				Video Solution - Solver to be (Java)
Keyboard	CF88-D2-B							0				Video Solution - Eng Muntaser Abukadeja
Mahmoud and a Tr	CF766-D2-B							0				Video Solution - Solver to be (Java)
								0				Watch - Graph Theory - BFS
Tic-Tac-Toe (I)	SPOJ TOE1							0				Video Solution - Eng Ayman Salah
Tic-Tac-Toe (II)	SPOJ TOE2							0				Video Solution - Eng Essam AlNaggar
Knight Moves	UVA 439							0				Video Solution - Eng Magdy Hasan
King's Path	CF242-D2-C							0				Video Solution - Dr Mostafa Saad
Bookworm	TIMUS 1638							0				Can you get AC first submission
	UVA 10461							0				
	SPOJ POSTERIN							0				Sol
								0				
Students and Sho	CF129-D2-B							0				Video Solution - Eng Abanob Ashraf
Dreamoon and Wil	CF476-D2-B							0				Video Solution - Eng Mohamed Adel
Chat Online	CF469-D2-B							0				Video Solution - Eng Mohamed Adel
Olympic Medal	CF215-D2-B							0				Video Solution - Eng Ahmed Salah
Filya and Homewo	CF714-D2-B							0				Video Solution - Eng Muntaser Abukadeja
Inna and New Mat	CF400-D2-B							0				Video Solution - Eng Mohamed Salah
Steps	CF152-D2-B							0				Video Solution - Eng Muntaser Abukadeja
Growing Mushroom	CF186-D2-B							0				Video Solution - Eng Mohamed Salah
Escape	CF148-D2-B							0				Video Solution - Eng Ahmed Salah
								0				Review - Recursion
								0				Watch - Intro to DP - 1
								0				Watch - Intro to DP - 2
Vacations	CF699-D2-C							0				
Woodcutters	CF545-D2-C							0				
Barcode	CF225-D2-C							0				Video Solution - Dr Mostafa Saad
Continents	UVA 11094							0				Video Solution - Eng Ayman Salah
Brownie Points	UVA 10865							0				Video Solution - Eng Magdy Hasan
Hanoi Tower	TIMUS 1054							0				Sol
								0				
Roma and Changir	CF262-D2-B							0				Video Solution - Eng Mohamed Salah
Bear and Strings	CF385-D2-B							0				Video Solution - Eng Mohamed Salah
I.O.U.	CF376-D2-B							0				Video Solution - Eng Abanob Ashraf
Jeff and Periods	CF352-D2-B							0				Video Solution - Eng Muntaser Abukadeja
Meeting	CF144-D2-B							0				Video Solution - Eng Muntaser Abukadeja
Chocolate	CF617-D2-B							0				Video Solution - Eng Yahia Ashraf
Easy Number Cha	CF236-D2-B							0				Video Solution - Eng Yahia Ashraf
Han Solo and Laz	CF514-D2-B							0				
Physics Practical	CF253-D2-B							0				Video Solution - Eng Mohamed Salah
Two Buttons	CF520-D2-B							0				Video Solution - Solver to be (Java)
								0				
								0				Watch - Computational Geometry - Complex Number and 2D Point
								0				Watch - Computational Geometry - Lines and Distances
Intersecting Lines	UVA 378							0				
The Stern-Brocot N	UVA 10077							0				
Mr. Kitayuta's Colo	CF505-D2-B							0				Video Solution - Eng Muntaser Abukadeja
								0				
DZY Loves Chemi	CF445-D2-B							0				
Kolya and Tanya	CF584-D2-B							0				Video Solution - Eng Yahia Ashraf
Suffix Structures	CF448-D2-B							0				Video Solution - Eng Mohamed Salah
Complete the Wor	CF716-D2-B							0				Video Solution - Eng Mohamed Salah
Sea and Islands	CF544-D2-B							0				Video Solution - Eng Mohamed Salah
Hopscotch	CF141-D2-B							0				Video Solution - Eng Yahia Ashraf



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	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0
Valera and Contest	CF369-D2-B							0				Video Solution - Eng Yahia Ashraf
Bear and Friendship	CF791-D2-B							0				Video Solution - Eng Mohamed Salah
Preparing Olympiad	CF550-D2-B							0				Video Solution - SolverToBe (Java)
								0				
								0				Watch - Focused and Diffused Thinking
								0				Watch - Graph Theory - MST - Kruskal
Highways	UVA 10147							0				Video Solution - Eng Mahmoud Adel
ACM contest and E	UVA 10600							0				Video Solution - Eng Moaz Rashad
Virtual Friends	UVA 11503							0				Video Solution - Eng Moaz Rashad
Arctic Network	UVA 10369							0				
Trees on the level	UVA 122							0				Video Solution - SolverToBe (Java)
Final Standings	TIMUS 1100							0				Stable sort exercise
Farm	TIMUS 1349							0				Learn Fermat's Last Theorem
								0				
Mashmokh and To	CF415-D2-B							0				Video Solution - Eng Salma Yehia
Approximating a C	CF602-D2-B							0				Video Solution - Eng Salma Yehia
Gena's Code	CF614-D2-B							0				
OR in Matrix	CF486-D2-B							0				
Fox And Two Dots	CF510-D2-B							0				Video Solution - Eng Mohamed Adel
Routine Problem	CF337-D2-B							0				Video Solution - Eng Mohamed Adel
Vasya and Wrestler	CF493-D2-B							0				
Hamming Distance	CF608-D2-B							0				
Wet Shark and Bis	CF621-D2-B							0				Video Solution - Eng Mahmoud Mabrok
Kefa and Company	CF580-D2-B							0				Video Solution - SolverToBe (Java)
Tavas and SaDDa	CF535-D2-B							0				Video Solution - Eng Abanob Ashraf
								0				
Minimum Ternary	CF1009-D12-B							0				
	CF1030-D12-B							0				
	CF1051-D2-B							0				
	CF1237-D12-B							0				
								0				
								0				Watch - Intro to Greedy
Painting Eggs	CF282-D2-B							0				
Pasha Maximizes	CF435-D2-B							0				Video Solution - Eng Hossam Yehia
Little Girl and Gam	CF276-D2-B							0				Video Solution - Eng Hossam Yehia
Pasha and String	CF525-D2-B							0				Video Solution - Eng Hossam Yehia
Booking System	CF416-D2-C							0				
Vanya and Exams	CF492-D2-C							0				
The Skyline Problem	UVA 105							0				
Hanoi Tower Tower	UVA 10276							0				Video Solution - Eng Mahmoud Adel
Maze Exploration	UVA 784							0				Video Solution - Eng Mahmoud Adel
IP-TV	UVA 1174							0				
								0				Before moving to another sheet, email me with feedback about these problems selection.
								0				
								0				You don't have to or encouraged to solve the next problem. If you felt you need so, try some of them. Or Proceed to next and solve in parallel, up to you.
								0				
Devu, the Dumb Guy	CF439-D2-B							0				Video Solution - Solver to be (Java)
Find The Bone	CF796-D2-B							0				Video Solution - Solver to be (Java)
Regular Bracket Sequence	CF26-D12-B							0				Video Solution - Solver to be (Java)
Inbox (100500)	CF465-D2-B							0				
Different is Good	CF672-D2-B							0				
Permutation	CF137-D2-B							0				
Little Elephant and	CF259-D2-B							0				
Airport	CF218-D2-B							0				
Cormen --- The Book	CF732-D2-B							0				
Prison Transfer	CF427-D2-B							0				
A and B and Comp	CF619-D2-B							0				
Letter	CF43-D2-B							0				
Game of Robots	CF670-D2-B							0				
								0				
African Crossword	CF90-D2-B							0				
Cows and Poker Game	CF284-D2-B							0				
Find Marble	CF285-D2-B							0				
Interesting drink	CF706-D2-B							0				
Megacity	CF424-D2-B							0				
Beautiful Paintings	CF651-D2-B							0				
Ilya and Queries	CF313-D2-B							0				
Code Parsing	CF255-D2-B							0				
Hungry Sequence	CF327-D2-B							0				
Chloe and the sequence	CF743-D2-B							0				
Luxurious Houses	CF581-D2-B							0				
								0				
								0				
Settlers' Training	CF63-D2-B							0				
Far Relative's Problem	CF629-D2-B							0				
Wilbur and Array	CF596-D2-B							0				
Text Document Analysis	CF723-D2-B							0				
Shower Line	CF431-D2-B							0				
Misha and Changliu	CF501-D2-B							0				
Coat of Anticubism	CF667-D2-B							0				
Ternary Logic	CF136-D2-B							0				
Counting Rhombi	CF189-D2-B							0				
Pashmak and Flow	CF459-D2-B							0				
								0				
								0				
The Monster and the	CF592-D2-B							0				
The Fibonacci Sequence	CF365-D2-B							0				
Spider Man	CF705-D2-B							0				

	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0
Little Robber Girl's	CF686-D2-B							0				
Unary	CF133-D2-B							0				
Canvas Frames	CF127-D2-B							0				
Ohana Cleans Up	CF554-D2-B							0				
Garland	CF408-D2-B							0				
Petya and Staircas	CF362-D2-B							0				
Equidistant String	CF545-D2-B							0				
Vanya and Food P	CF677-D2-B							0				
Calendar	CF304-D2-B							0				
Amr and Pins	CF507-D2-B							0				
Polo the Penguin a	CF289-D2-B							0				
								0				
George and Rounc	CF387-D2-B							0				
Alyona and flowers	CF740-D2-B							0				
Urbanization	CF735-D2-B							0				
Testing Pants for S	CF104-D2-B							0				
Cells Not Under At	CF701-D2-B							0				
Vanya and Books	CF552-D2-B							0				
Worms	CF474-D2-B							0				
Fortune Telling	CF59-D2-B							0				
								0				
Walking in the Rai	CF192-D2-B							0				
Dima and To-do Li	CF366-D2-B							0				
Sail	CF298-D2-B							0				
Fox and Cross	CF389-D2-B							0				
Rebranding	CF591-D2-B							0				
Increase and Decr	CF246-D2-B							0				
Alyona and Mex	CF682-D2-B							0				
Coins	CF58-D2-B							0				
Berland National L	CF567-D2-B							0				
Art Union	CF416-D2-B							0				
								0				
BerSU Ball	CF489-D2-B							0				
Random Teams	CF478-D2-B							0				
Friends	CF94-D2-B							0				
War of the Corpora	CF625-D2-B							0				
Road Construction	CF330-D2-B							0				
Binary Number	CF92-D2-B							0				
Before an Exam	CF4-D2-B							0				
Running Student	CF9-D2-B							0				
Anton and currenc	CF508-D2-B							0				
Phone Numbers	CF151-D2-B							0				

Problem Name	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0
												DONT Skip colored problems. Don't skip others unless a block is really easy for you
												Remove the given link and write a comment. Start your comment with a classification for the problem: Useless, repeated idea, boring, normal, good problem, interesting problem or important problem.
Drazil and Factorial	CF515-D2-C							0				Video Solution - Dr Mostafa Saad
Lucky Permutation	CF304-D2-C							0				
Soldier and Cards	CF546-D2-C							0				
Watchmen	CF651-D2-C							0				
								0				
								0				Watch - Thinking - Concretely - Symbolically - Pictorially
								0				Watch - Thinking - Problem Constraints
								0				Watch - Number Theory - Primes
								0				Video Solution - Eng Abanob Ashraf
Fox Dividing Chees	CF371-D2-B							0				
Duff in Love	CF588-D2-B							0				
Twin Primes	UVA 10394							0				
Summation of Four	UVA 10168							0				Video Solution - Eng Moaz Rashad
The Lottery	UVA 10325							0				Sol
Hamburgers	CF371-D2-C							0				
Mint	UVA 10717							0				Sol
BITMAP - Bitmap	SPOJ.BITMAP							0				
	UVA 12952							0				
	CODECHEF.GCDM							0				Sol uses __int128 to avoid overflow
	UVA 10843							0				Theory result to read
The Child and Set	CF417-D2-B							0				
Tanya and Postcard	CF518-D2-B							0				
Mike and Fun	CF388-D2-B							0				
								0				
Greg and Array	CF296-D2-C							0				
The World is a The	CF131-D2-C							0				Video Solution - Eng Youssef Ali
Trains	CF88-D2-C							0				Video Solution - Solver to be (Java)
Semifinals	CF378-D2-B							0				
Towers	CF478-D2-B							0				
Gerald is into Art	CF386-D2-B							0				
								0				Watch - Algebra - Number Bases and Polynomials
To Carry or not to	UVA 10469							0				Sol
Beat the Spread!	UVA 10812							0				
								0				
Summation of Poly	UVA 10302							0				
Polly the Polynomia	UVA 498							0				
	UVA 11053							0				Find O(n) Solution
	LiveArchive 8078							0				Sol
								0				Watch - Algebra - Patterns in Sequences
R U Kidding Mr. Fe	UVA 10509							0				
Wandering Queen	SPOJ.QUEEN							0				Sol to read
Spreadsheet	UVA 196							0				
	HACKR.sherlock-an							0				Sol
								0				Watch - Algebra - Summations
								0				Watch - Algebra - Basic Matrix Operations
Searching for Grap	CF402-D2-C							0				
Flying Saucer Segr	CF227-D2-C							0				
Vasya and Petya's	CF577-D2-C							0				
Round Table Knigh	CF71-D2-C							0				
Kefa and Park	CF580-D2-C							0				Video Solution - Solver to be (Java)
Knight Tournament	CF357-D2-C							0				
Special Offer! Supe	CF736-D2-B							0				
								0				
								0				Watch - Thinking - Problem Abstraction
								0				Watch - Thinking - Problem Reverse
								0				Watch - Search Techniques - Backtracking
Graph Coloring	UVA 193							0				Video Solution - Dr Mostafa Saad
23 out of 5	UVA 10344							0				Video Solution - Eng Mohamed Nasser
8 Queens Chess P	UVA 750							0				Video Solution - Eng Ayman Salah
Assemble	UVA 12124							0				Sol
	SPOJ.FUNPROB							0				Sol
								0				
Magic Formulas	CF424-D2-C							0				
Pythagorean Triple	CF707-D2-C							0				
Gerald's Hexagon	CF560-D2-C							0				
Points on Line	CF252-D2-C							0				
Find Maximum	CF353-D2-C							0				
Jzzhu and Sequenc	CF460-D2-B							0				
Simple Game	CF370-D2-B							0				
Prime Matrix	CF271-D2-B							0				
								0				Review bitmasking
								0				Watch - DP - Subset Style
Vacation	UVA 10192							0				Explained in the tutorial videos
Dividing coins	UVA 562							0				Video Solution - Eng Ayman Salah
								0				Watch - DP - Consecutive Ranges Style
	SRM149-D1-500							0				
	SRM536-D2-1000							0				
The Blocks Problem	UVA 101							0				
Divisibility	UVA 10036							0				
	UVA 11628							0				Sol
								0				
Rational Resistanc	CF344-D2-C							0				
k-Multiple Free Set	CF275-D2-C							0				
Polycarpus' Dice	CF534-D2-C							0				Sol
Print Check	CF531-D2-B							0				

Problem Name	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0
Playing Cubes	CF351-D2-B							0				
T-Primes	CF436-D2-B							0				
								0				Watch - DP - Nested Ranges Style
								0				Watch - DP - General Ranges Style
								0				
Creating Palindrom	UVA 11753							0				Video Solution - Eng Aya Elymany
Again Palindrome	UVA 10617							0				Sol to read
Exploring Pyramids	UVA 1362							0				Video Solution - Eng Ayman Salah
Cutting Sticks	UVA 10003							0				
Optimal Array Multi	UVA 348							0				Sol
Accordion Patience	UVA 127							0				Video Solution - Eng Moaz Rashad
Software CRC	UVA 128							0				Video Solution - Eng Moaz Rashad
	ZOJ 1200							0				
								0				
Maze	CF378-D2-C							0				
Thor	CF705-D2-C							0				
Hard problem	CF706-D2-C							0				
Unusual Product	CF405-D2-C							0				
Palindrome Transf	CF486-D2-C							0				
Removing Columns	CF496-D2-C							0				Video Solution - Dr Mostafa Saad
Crazy Town	CF499-D2-C							0				Video Solution - Dr Mostafa Saad
Queue	CF480-D2-B							0				
Vika and Squares	CF810-D2-B							0				
Cosmic Tables	CF420-D2-B							0				
								0				Watch - Thinking - Incrementally
								0				Watch - Thinking - Problem Domain re-interpretation
								0				Watch - Number Theory - Factorization
Prime Factors	UVA 583							0				
Mr. Azad and his S	UVA 10490							0				Sol to read
Perfect P-th Power	UVA 10622							0				Video Solution - Eng Moaz Rashad
Prime Land	UVA 516							0				
	UVA 10920							0				
	SRM274-D1-500							0				
								0				
Text Editor	CF253-D2-C							0				
Alternative Thinking	CF604-D2-C							0				
Tennis Champions	CF735-D2-C							0				
Guess Your Way O	CF507-D2-C							0				Video Solution - Dr Mostafa Saad
Biathlon	CF84-D2-C							0				
Marina and Vasya	CF584-D2-C							0				
Divide by Three	CF792-D2-C							0				Video Solution - Solver to be (Java)
Covered Path	CF304-D2-B							0				
Facetook Priority W	CF76-D2-B							0				
Treasure Hunt	CF373-D2-B							0				
								0				
How Many Points o	UVA 10790							0				Sol
Factovisors	UVA 10139							0				Sol to read
Fractions Again?!	UVA 10976							0				Sol to read
Cut Ribbon	CF189-D2-A							0				Video Solution - Solver to be (Java)
								0				
								0				Watch - Probability - First 9 videos
Cows and Cars	UVA 10491							0				Revise Probability
What is the Probab	UVA 10056							0				Sol
Let's Dance	UVA 10218							0				Sol
Probability Given	UVA 11181							0				Sol
Another lottery	UVA 11628							0				Sol
Airplane	UVA 12461							0				Sol to read
	HACKR lower-3-col							0				Learn_Ferma's little theorem
	CF445-D2-C							0				
	HACKR a-circle-and							0				
	UVA 11573							0				Learn 0/1 BFS
Rankings	UVA 12263							0				Sol
								0				
Hacker, pack your I	CF822-D2-C							0				Video Solution - Solver to be (Java)
The Meaningless G	CF834-D2-C							0				Video Solution - Solver to be (Java)
Star sky	CF835-D2-C							0				Video Solution - Solver to be (Java)
								0				Before moving to another sheet, email me with feedback about these problems selection.
								0				
								0				You don't have to or encouraged to solve the next problem. If you felt you need so, try some of them. Or Proceed to next and solve in parallel, up to you.
								0				
Diverse Permutatio	CF483-D2-C							0				
Replacement	CF136-D2-C							0				
Homework	CF102-D2-C							0				
Little Elephant and	CF221-D2-C							0				
Developing Skills	CF581-D2-C							0				
Maxim and Discour	CF262-D2-C							0				
Fox and Box Accur	CF389-D2-C							0				
Ice Skating	CF218-D2-C							0				
Valera and Tubes	CF441-D2-C							0				
Secret	CF271-D2-C							0				
Key Task	SPOJ CERC07K							0				
Cleaning Robot	SPOJ CLEANRBT							0				
								0				
They Are Everywhe	CF701-D2-C							0				
Monitor	CF16-D2-C							0				
System Administrat	CF22-D2-C							0				
Lucky Sum	CF122-D2-C							0				

Problem Name	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0
NP-Hard Problem	CF688-D2-C							0				
Vladik and fractions	CF743-D2-C							0				
Case of Matryoshki	CF556-D2-C							0				
Vanya and Label	CF677-D2-C							0				
Exams	CF479-D2-C							0				
Boredom	CF456-D2-C							0				
Learning Language	CF278-D2-C							0				
Beautiful Sets of P	CF268-D2-C							0				
								0				
Strategic Defense I	UVA 497							0				Explained in the tutorial videos
String to Palindrom	UVA 10739							0				Explained in the tutorial videos
Trouble of 13-Dots	UVA 10819							0				
Sagheer and Nubia	CF812-D2-C							0				Video Solution - Solver to be (Java)
Purification	CF330-D2-C							0				
Division into Teams	CF149-D2-C							0				
Disposition	CF49-D2-C							0				
Mashmokh and Nui	CF415-D2-C							0				
Statues	CF129-D2-C							0				
Inna and Huge Car	CF400-D2-C							0				
Anagram Search	CF144-D2-C							0				
Ilya and Sticks	CF525-D2-C							0				
Day at the Beach	CF599-D2-C							0				
								0				
Appleman and Toa	CF462-D2-C							0				Sol
Anya and Smartph	CF518-D2-C							0				
Little Girl and Maxi	CF276-D2-C							0				
Sereja and Algori	CF368-D2-C							0				
The Child and Toy	CF437-D2-C							0				
Perfect Pair	CF318-D2-C							0				
Another Problem o	CF165-D2-C							0				
Socks	CF731-D2-C							0				
Valera and Electi	CF369-D2-C							0				

Problem Name	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0
								0				Watch - Thinking - Search Space and Output Analysis
								0				Watch - Thinking - Observations Discovery
								0				Watch - Game Theory - Intro
Win or Freeze	CF151-D2-C							0				Video Solution - Dr Mostafa Saad
Euclid's Game	UVA 10368							0				Video Solution - Eng Moaz Rashad
Pyramids	SPOJ PIR							0				Sol
Power of Cryptography	UVA 113							0				Sol to read
	SRM458-D2-500							0				
Is There A Second V	UVA 10462							0				
	SRM381-D2-1000							0				
								0				
Modified GCD	CF75-D2-C							0				Video Solution - Dr Mostafa Saad
Alyona and mex	CF740-D2-C							0				Video Solution - Dr Mostafa Saad
Hamburgers	CF371-D2-C							0				
Wet Shark and Flow	CF621-D2-C							0				
Predict Outcome of t	CF451-D2-C							0				
Balls and Boxes	CF260-D2-C							0				Video Solution - Dr Mostafa Saad
Alice and Bob	CF347-D2-C							0				Video Solution - Eng Mohamed Nasser
Mahmoud and Ehab	CF959-D2-C							0				Video Solution - Eng Mohamed Salah
Almost Equal	CF1206-D2-C							0				Video Solution - Dr Mostafa Saad
	CF1220-D12-C							0				
	CF1065-D2-C							0				
	CF1036-D2-C							0				
	CF1068-D2-C							0				
	CF313-D2-C							0				
Balls Game	CF106-D2-B							0				
Magical Array	CF84-D2-B							0				
								0				Watch - Thinking - Misc - Solution Verification - Implementation
								0				Watch - Graph Theory - Dijkstra
Jugs	UVA 571							0				Video Solution - Dr Mostafa Saad
Sending email	UVA 10986							0				
Lift Hopping	UVA 10801							0				
Shopping	SPOJ SHOP							0				
Ordering	UVA 872							0				
	CF1064-D2-C							0				
	CF1059-D2-C							0				
	CF101933-GYM-K							0				Sol
Karen and Coffee	CF816-D2-B							0				Video Solution - Dr Mostafa Saad
								0				
Bulls and Cows	CF63-D2-C							0				Sol
Xor-tree	CF430-D2-C							0				
Median Smoothing	CF591-D2-C							0				
Coloring Trees	CF711-D2-C							0				Video Solution - Solver to be
Clear Symmetry	CF202-D2-C							0				
	CF1237-D12-C2							0				
Sereja and Mirroring	CF152-D2-B							0				
Restoring Painting	CF173-D2-B							0				
								0				
								0				Watch - Computational Geometry - Lines Intersections
Gleaming the Cubes	UVA 737							0				Sol
Intersecting Line Seg	UVA 866							0				Sol
								0				Watch - Computational Geometry - Circles
The Circumference of	UVA 438							0				Sol
Points in Figures: Re	UVA 477							0				Sol
Square Pegs And Rect	UVA 356							0				Sol to read
	UVA 453							0				Learn Handling Precisions
Divisibility of Factors	UVA 10484							0				Sol to read
	SRM436-D2-500							0				
	CF975-D2-C							0				
	CF1047-D2-C							0				
	CF1075-D2-C							0				
	CF758-D2-C							0				
	UVA 10525							0				Video Sol. Also solvable in 2 other ways.
								0				
Prime Permutation	CF124-D2-C							0				
Hometask	CF155-D2-C							0				
Terse princess	CF148-D2-C							0				Video Solution - Eng Mohamed Nasser
Hacking Cypher	CF490-D2-C							0				
Dreamoon and Sum of	CF476-D2-C							0				Video Solution - Dr Mostafa Saad
Try and Catch	CF195-D2-C							0				Editorial - Eng Ahmed Osama
Primes or Palindrom	CF569-D2-C							0				
View Angle	CF257-D2-C							0				Editorial - Eng Ahmed Osama
Little Pony and Sort	CF104-D2-B							0				
								0				Watch - Thinking - Error Inspection - History - Contest Strategy
								0				Watch - DP - Building Output
Unidirectional TSP	UVA 116							0				
Make Palindrome	UVA 10453							0				Sol
Fast Food	UVA 662							0				
Palindromic Subsequ	UVA 11404							0				
Gone Fishing	UVA 757							0				Sol to read
Special Olympics	CF199-D2-B							0				
Rings and Glue	UVA 10301							0				Sol
								0				Watch - DP - Counting
k-Tree	CF431-D2-C							0				Video Solution - Solver to be (Java)
Caesar's Legions	CF118-D2-D							0				
UnsealTheSafe	SRM354-D2-1000							0				

Problem Name	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	
DiceGames	SRM349-D1-500							0				
	SPOJ TWINSNOW							0				Sol - text clarification
	SPOJ FACENEMY							0				Sol
								0				
No to Palindromes!	CF465-D2-C							0				
Triangle	CF408-D2-C							0				
To Add or Not to Add	CF231-D2-C							0				
Number of Ways	CF466-D2-C							0				Video Solution - Solver to be (Java)
Queue	CF141-D2-C							0				
Magical Boxes	CF270-D2-C							0				
Find Pair	CF160-D2-C							0				
Multitasking	CF 389-D2-B							0				
Non-square Equation	CF 233-D2-B							0				
								0				Watch - Thinking - Let's Put All Together
								0				Watch - DP - Table Method
								0				Watch - Graph Theory - Floyd Warshal
Frogger	UVA 534							0				Sol
Identifying Concurrent	UVA 334							0				
Numbering Paths	UVA 125							0				Sol
Jack Straws	UVA 273							0				Sol
Longest Match	UVA 10100							0				
Isolated Segments	UVA 11343							0				Sol
Counting	UVA 10198							0				Needs Big Integer. Have it in your cpp library or learn Java for these (rare) cases
								0				
Mafia	CF349-D2-C							0				
Sereja and Prefixes	CF381-D2-C							0				
About Bacteria	CF199-D2-C							0				
DNA Alignment	CF520-D2-C							0				
Geometric Progressi	CF567-D2-C							0				
Watering Flowers	CF617-D2-C							0				
Quiz	CF337-D2-C							0				
Secret Combination	CF 486-D2-B							0				
MUH and Important	CF 671-D2-B							0				
Lucky Mask	CF 196-D2-B							0				
								0				
								0				Watch - Measuring Algorithms Performance - 2
								0				Watch - Graph Theory - Tree Diameter and Isomorphism
PT07Z	SPOJ PT07Z							0				Sol
Roads in the North	UVA 10308							0				Sol
Subway tree system	LIVEARCHIVE 2935							0				Sol
								0				
Shaass and Lights	CF294-D2-C							0				Video Solution - Dr Mostafa Saad
Journey	CF721-D2-C							0				
Captain Marmot	CF474-D2-C							0				Video Solution - Dr Mostafa Saad
The Big Race	CF592-D2-C							0				
Molly's Chemicals	CF776-D2-C							0				Video Solution - Solver to be (Java)
Anatoly and Cockro	CF 716-D2-B							0				
Opposites Attract	CF 101-D2-B							0				
								0				
Railway	UVA 10263							0				Sol to read
Factorial Factors	UVA 884							0				
Wifi Access	UVA 12748							0				Sol
Lining Up	UVA 270							0				Video Solution - Eng Mohamed Nasser. Don't Code O(N^3)
Pouring water	SPOJ POUR1							0				Video Solution - Eng Moaz Rashad
	CF23-D12-C							0				
	CF869-D2-C							0				
	SRM321-D1-500							0				See Rushiose's code in arena summary
								0				
								0				Watch Video - Expected Value
God, Save me	UVA 10777							0				Sol
	CF839-D2-C							0				
	CF454-D2-C							0				
	SRM577-D1-250							0				Editorial
	HACKR lazy-sorting							0				Revise Expected Value
	SPOJ ALIENS							0				Sol - Practice on min enclosing circle
	CF340-D2-B							0				
								0				Before moving to another sheet, email me with feedback about these problems selection.
Optional Problems									0	You don't have to or encouraged to solve the next problem. If you felt you need so, try some of them. Or Proceed to next and solve in parallel, up to you.		
								0				
Checkposts	CF427-D2-C							0				
Literature Lesson	CF139-D2-C							0				
Arpa's loud Owf and	CF742-D2-C							0				
Parity Game	CF298-D2-C							0				
Beauty Pageant	CF246-D2-C							0				
Heroes	CF80-D2-C							0				
Dynasty Puzzles	CF192-D2-C							0				
Buns	CF106-D2-C							0				
Counting Kangaroos	CF373-D2-C							0				
Corporation Mail	CF56-D2-C							0				
Matrix	CF365-D2-C							0				
Pick up sticks	UVA 11686							0				Sol
								0				
Little Elephant and I	CF205-D2-C							0				
Sereja and Contest	CF315-D2-C							0				

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	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0
Vasya and Robot	CF355-D2-C							0				
Hockey	CF96-D2-C							0				
Petya and File System	CF66-D2-C							0				
Kyoya and Colored Tiles	CF554-D2-C							0				
George and Job	CF467-D2-C							0				
Harmony Analysis	CF610-D2-C							0				
Anton and Making P	CF734-D2-C							0				
Table Decorations	CF478-D2-C							0				
Recycling Bottles	CF672-D2-C							0				
								0				
Message	CF157-D2-C							0				
Wilbur and Points	CF596-D2-C							0				
Cows and Sequences	CF284-D2-C							0				
Ladder	CF279-D2-C							0				
Not Wool Sequences	CF239-D2-C							0				
Anagram	CF254-D2-C							0				
DZY Loves Sequences	CF447-D2-C							0				
DZY Loves Physics	CF445-D2-C							0				
Misha and Forest	CF501-D2-C							0				
Jzzhu and Chocolate	CF450-D2-C							0				
Cinema	CF670-D2-C							0				
								0				
Report	CF631-D2-C							0				
Bear and Prime Numbers	CF385-D2-C							0				
Robbery	CF90-D2-C							0				
Vasya and Basketball	CF493-D2-C							0				
Vanya and Scales	CF552-D2-C							0				
Pashmak and Buses	CF459-D2-C							0				
Fancy Number	CF118-D2-C							0				

Problem Name	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0
Dividing Island	CF63-D2-D							0				
Flowers	CF474-D2-D							0				Video Solution - Solver to be (Java)
Dima and Bacteria	CF400-D2-D							0				
	CF1043-D12-C							0				
	CF1033-D12-C							0				
	CF1066-D3-E							0				
	CF534-D2-D							0				
	CF899-D2-E							0				
	CF729-D12-D							0				
Tourist Problem	CF386-D2-C							0				
Lorenzo Von Matter	CF787-D2-C							0				
Restore Graph	CF404-D2-C							0				
	CF308-D1-C							0				
	CF101-D1-B							0				Sol
	SRM569-D2-1000							0				
	CF961-D12-D							0				
	CF955-D2-C							0				
	UVA 12869							0				Sol
	CF372-D1-B							0				
								0				Watch - Data Structures - Segment Tree (2 vid)
Interval Product	UVA 12532							0				
Potentiometers	LIVEARCHIVE 2191							0				
Halt The War	SPOJ CDC12_H							0				
Counting Primes	SPOJ CNTPRIME							0				
Horrible Queries	SPOJ HORRIBLE							0				
Light Switching	SPOJ LITE							0				
Circular RMQ	CF52-D12-C							0				
A Famous City	SPOJ CITY2							0				Sol
RMQ with Shifts	UVA 12299							0				See scanf and printf usage
R2D2 and Droid Army	CF514-D2-D							0				Use rmq
Ahoy, Pirates!	UVA 11402							0				Sol
Brackets	SPOJ BRCKTS							0				Sol
Present	CF460-D2-C							0				
MessageMess	SRM149-D1-500							0				
DiceGames	SRM349-D1-500							0				
Mirror, Mirror	UVA 466							0				
Maximum Sum	SPOJ KGSS							0				
	SRM297-D1-500							0				
	SRM441-D1-250							0				
	CF201-D1-B							0				
	CF380-D1-C							0				
	CF161-D12-D							0				Reading: DP on Trees
	CF61-D2-E							0				
	SPOJ KOMPICI							0				
Quantity of Strings	CF151-D2-D							0				
Eternal Victory	CF61-D2-D							0				
Array Division	CF808-D2-D							0				Video Solution - Solver to be (Java)
	CF45-D12-D							0				
	SRM428-D2-1000							0				
	SGU 321							0				Sol
	CODECHEF OPPOSITI							0				
	SRM513-D2-1000							0				
	SRM292-D1-500							0				
	SRM405-D2-1000							0				
Hiring Staff	CF216-D2-C							0				
Tavas and Karafs	CF108-D2-C							0				
Permutations	CF186-D2-C							0				Sol
								0				Watch - Two pointers technique
Spider's Web	CF216-D2-D							0				
Chips	CF334-D2-D							0				
Vasya and String	CF676-D2-C							0				
The SetStack Comp	LiveArchive 3634							0				Sol
Database	UVA 1592							0				
Can you answer the	SPOJ GSS1							0				Sol
	SPOJ BILLIARD							0				Sol
Can you answer the	SPOJ GSS3							0				
	SPOJ ABA12E							0				Sol
	UVA 11825							0				Sol
	CF472-D12-D							0				
	UVA 12325							0				Prove your Solution
	UVA 12047							0				Sol
	UVA 10705							0				Sol
	UVA 1555							0				Sol
	CF80-D2-D							0				
								0				
Mahmoud and a Dic	CF766-D2-D							0				Video Solution - Solver to be (Java)
An overnight dance	CF814-D2-D							0				Video Solution - Solver to be (Java)
Polyline	CF617-D2-D							0				
Queue	CF92-D2-D							0				
	CF1038-D2-D							0				
	CF552-D2-D							0				
	CF101917-D12-E							0				
	CF1058-D2-D							0				

Problem Name	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0
	CF1042-D12-D							0				
	SPOJ BIA							0				Sol
Plant	CF186-D3-C							0				
Reberland Linguistic	CF987-D3-A							0				
Lucky Permutation	CF381-D3-C							0				
								0				DP - Probability
Dice Throwing	UVA 10759							0				Sol
TestBettingStrategy	SRM339-D1-500							0				
Collecting Bugs	PKU 2096							0				Sol
France '98	UVA 542							0				Sol
Tribbles	UVA 11021							0				Sol
Tennis contest	UVA 12457							0				Sol
Water Falls	UVA 833							0				
Number Sequence	UVA 10706							0				
Is It A Tree?	UVA 615							0				
Help R2-D2!	SPOJ HELPR2D2							0				
	CF1016-D2-E							0				
	UVA 11997							0				Sol
	FbHkrCup 18-R1-A							0				
	SRM456-D2-1000							0				
								0				
Andrey and Problem	CF443-D2-D							0				Sol
Three Logos	CF581-D2-D							0				
Good Sequences	CF265-D2-D							0				
Party	CF116-D3-C							0				
Cupboard and Ballo	CF383-D3-C							0				
Cycles	CF238-D3-A							0				
								0				DP - Masks (2 vid)
Pebble Solitaire	UVA 10651							0				
Kefa and Dishes	CF580-D2-D							0				Video Solution - Solver to be
Permutations	SPOJ PERMUT1							0				
Assignments	SPOJ ASSIGN							0				
	CF16-D2-E							0				
Count the Faces.	UVA 10178							0				Read first Euler Formula
LCM Cardinality	UVA 10892							0				
Robot Rapping Res	CF645-D12-D							0				
Wavio Sequence	UVA 10534							0				Sol
	CF1012-D1-A							0				
	UVA 10342							0				Sol - read the statement clarification
								0				
Directed Roads	CF711-D2-D							0				
Block Tower	CF327-D2-D							0				
A and B and Interes	CF519-D2-D							0				
As Fast As Possible	CF701-D2-D							0				
Chloe and pleasant	CF743-D2-D							0				
Roads in Berland	CF36-D3-A							0				
Photographer	CF303-D3-C							0				
LCM Challenge	CF126-D3-C							0				
								0				String Processing - Trie
Search in the diction	SPOJ.DICT							0				
Disk Tree	UVA 1586							0				
Phone List	SPOJ.PHONELST							0				
Cellphone Typing	UVA 12526							0				
Vasily's Multiset	CF706-D2-D							0				
Exchange Rates	UVA 10113							0				
Equation	UVA 727							0				
Safe	CF47-D2-D							0				
Central Post Office	UVA 12379							0				Sol
Permallex	UVA 153							0				Sol
								0				DP - Sub-rectangle style
	UVA 507							0				
	UVA 10667							0				
								0				
Volleyball	CF96-D2-D							0				
Lazy Student	CF606-D2-D							0				
Multiplication Table	CF448-D2-D							0				Video Solution - Solve to be (Java)
	CF486-D2-D							0				
	CF1040-D2-D							0				
	CF264-D1-C							0				
	CF506-D1-A							0				
	CODECHEF.KSUM							0				
	CF623-D1-B							0				
Divisible by Seven	CF136-D3-A							0				
Devu and Partitionin	CF436-D3-C							0				
Arthur and Table	CF557-D3-C							0				

Problem Name	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0
								0				String Processing - KMP (2 vid)
Oulipo	PKU 3461							0				
A Needle in the He	SPOJ NHAY							0				
Finding the Tesser	SPOJ TESSER							0				
Period	SPOJ PERIOD							0				
Prefixes and Suffix	CF432-D2-D							0				
Tavas and Maleka	CF535-D2-D							0				
Be Efficient	UVA 11155							0				
Vertex Cover	SPOJ PT07X							0				Sol
First Digit Law	CF54-D12-C							0				
	CF500-D12-D							0				
	HACKR.vertical-sticks							0				
	UVA 10174							0				
	UVA 1333							0				Sol - Text/Background Clarification
	CF842-D2-D							0				
	CF709-D2-D							0				
	SPOJ MSKYCODE							0				Sol
	LiveArchive 8015							0				Sol
								0				
Robin Hood	CF672-D2-D							0				
End of Exams	CF94-D2-D							0				
Equivalent Strings	CF560-D2-D							0				Sol to learn
Count Good Subst	CF451-D2-D							0				
Mushroom Scienti	CF186-D2-D							0				
Analyzing Polyline	CF195-D2-D							0				
	CF1023-D12-E							0				
	CF1060-D12-C							0				
Bear and Prime 1C	CF350-D2-C							0				
Team	CF403-D2-E							0				DP - Games (2 vid)
								0				
Bachet's Game	UVA 10404							0				Sol
EllysCheckers	SRM534-D1-250							0				
RowAndCoins	SRM522-D1-250							0				
BagsOfGold	SRM228-D1-500							0				
Bag of mice	CF148-D2-D							0				
	CF1147-D1-B							0				
MELE3	SPOJ MELE3							0				Sol
Roads	SPOJ ROADS							0				Sol
The Tree Root	UVA 10459							0				Sol
SKYLINE	UVA 1232							0				Sol
Ordering the Soldi	SPOJ ORDERS							0				Sol
Playlist	CF268-D2-E							0				Sol
	SRM481-D1-500							0				
								0				
Little Girl and Max	CF276-D2-D							0				See editorials
Two Strings	CF224-D2-D							0				Sol
Big Maximum Sum	CF75-D2-D							0				
	SPOJ BRCKTS2							0				Sol
	CF1057-D12-C							0				
	CF1066-D3-F							0				
	CF1064-D2-E							0				
	CF459-D2-E							0				
	UVA 10888							0				
	CF1043-D12-D							0				
Football Champion	CF 300-D2-C							0				
Given Length and	CF 408-D2-C							0				
								0				
Trip Routing	UVA 186							0				Sol
Scheduling Lectur	UVA 607							0				Sol
Weird Function	SPOJ WEIRDEN							0				Sol
The ? 1 ? 2 ? ... ?	UVA 10025							0				
Dictionary Subseq	SPOJ DICTSUB							0				Sol
Jimmi's Riddles	UVA 10058							0				Sol
Friends and Subse	CF689-D2-D							0				
Sum of Squares w	SPOJ SEGSRSS							0				Sol
Travel in Desert	UVA 10816							0				Sol
Almost Union-Find	UVA 11987							0				Sol
	SRM537-D2-1000							0				
	CF513-D12-C							0				Sol
	SRM453.5-D2-1000							0				
	SPOJ PARSUMS							0				Sol
	CF1138-D2-D							0				
								0				
Cow Program	CF284-D2-D							0				
Random Task	CF431-D2-D							0				
Greg and Graph	CF296-D2-D							0				
Russian Roulette	CF104-D2-D							0				
Bicycle Race	CF659-D2-D							0				
Greenhouse Effect	CF270-D2-D							0				
	CF645-D12-D							0				
	CF459-D2-C							0				
	CODECHEF REDCGA							0				
	CF1005-D3-F							0				
Pocket Book	CF 182-D2-C							0				
Levko and Array R	CF361-D2-C							0				
Ice Cave	CF360-D2-C							0				

Problem Name	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0
Robbery	UVA 707							0				Sol
The Errant Physicist	UVA 126							0				Sol
Brackets sequence	UVA 1626							0				Sol
Unique World	UVA 10448							0				Video Solution - Dr Mostafa Saad
Bad Luck Island	CF540-D2-D							0				
Shopping Trip	UVA 11284							0				Sol
Hotel booking	UVA 11635							0				Sol
	CF337-D2-D							0				Sol
	HACKR_ajourney							0				
	CF665-D12-E							0				
								0				
Hit Ball	CF203-D2-D							0				
Sereja and Anagrams	CF368-D2-D							0				Sol
Choosing Capital for Flandria	CF219-D2-D							0				
Coloring Brackets	CF149-D2-D							0				Sol
Cycle in Graph	CF263-D2-D							0				
	CF101187-GYM-F							0				Sol
	SRM319-D1-500							0				
	AtCoder092-ARC-B							0				
	AtCoder002-AGC-C							0				
Fixing Typos	CF 304-D2-C							0				
Cutting Figure	CF 104-D2-C							0				
Escape from Stoneland	CF 205-D2-C							0				
								0				Geometry - Simple and Convex Polygons
								0				Geometry - Polygon Area - Centroid - Cut
Best Triangulation	SRM278-D2-500							0				
Trees on My Island	UVA 10088							0				
Packing polygons	UVA 10005							0				Sol
	LIVEARCHIVE 2831							0				Use polygon cut
Video Surveillance	UVA 588							0				Use polygon cut
	SRM514-D1-500							0				
	SRM473-D1-500							0				
	SRM555-D2-1000							0				
	UVA 557							0				Sol
	SRM285-D1-500							0				
Xrange's Pancake	HACKR_xrange-and-piz							0				Sol
	SRM525-D1-500							0				
	UVA 11648							0				Sol
	CF101864-GYM-A							0				Sol
	CF101864-GYM-L							0				Sol
	CF28-D12-C							0				
								0				Geometry - Point in polygon
	UVA 881							0				Sol
	UVA 11665							0				Sol
	TIMUS 1599							0				Sol
Polygons	UVA 137							0				Sol
								0				Graph Theory - Maximum Flow (2 vid)
Potholes	SPOJ_POTHOLE							0				Sol
Power Transmission	UVA 10330							0				Sol
Gopher II	UVA 10080							0				Sol
Software Allocation	UVA 259							0				Sol
	UVA 10349							0				Sol - 2 ways
	UVA 12168							0				Sol
A Plug for UNIX	UVA 753							0				Sol
	UVA 10349							0				Sol - 2 ways
Intergalactic Map	SPOJ_IM							0				Sol
	UVA 11159							0				Sol
	UVA 1194							0				Sol
Fence Obstacle Course	PKU 2374							0				Sol
River Crossing	UVA 10514							0				Sol
	SRM368-D1-500							0				Sol
	SRM373-D2-1000							0				Sol
	SRM558-D1-250							0				
	ZOJ 2587							0				Sol
	SRM550-D2-1000							0				
	UVA 10180							0				Sol
	TIMUS 1156							0				
	UVA 1184							0				Sol
	UVA 670							0				Sol

Problem Name	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0
								0				Graph Theory - SCC (2 vid)
The Bottom of a G	SPOJ BOTTOM							0				Sol
Test	UVA 10731							0				Sol
	SRM312-D1-500							0				
	CF467-D2-D							0				
Theseus and labyr	CF676-D2-D							0				
Cunning Gena	CF418-D1-B							0				
Sabotage	UVA 10480							0				Sol
	SRM352-D2-1000							0				
Garland	UVA 1555							0				Sol
	CF101589-GYM-F							0				Sol
	CF1016-D12-D							0				
	CF26-D12-D							0				Sol - must read
	CF1012-D1-B							0				
	CF1010-D1-C							0				
	CF633-D12-D							0				
	HACKR house-location							0				Sol
	CF621-D2-D							0				Sol
	CF101992-GYM-D							0				Sol
	SRM608-D2-1000							0				Sol
								0				
Gifts by the List	CF681-D2-D							0				
DZY Loves Modifi	CF447-D2-D							0				Prove
Mike and Feet	CF548-D2-D							0				
Special Grid	CF435-D2-D							0				
Roman and Numb	CF401-D2-D							0				
Persistent Bookca	CF707-D2-D							0				Sol
Regular Bridge	CF550-D2-D							0				
	CF1059-D2-D							0				
Almost Arithmetic	CF 358-D2-C							0				
Title	CF 364-D2-C							0				
Treasure	CF495-D2-C							0				
								0				
Unique Attack	ZOJ 2587							0				
End of Fun	SPOJ DCEPC12E							0				
Grammar Evaluati	UVA 622							0				Sol
Find the Winning N	UVA 10111							0				Sol
Check the difficulty	PKU 2151							0				Sol
Proving Equivalen	UVA 12167							0				Sol
DDF	UVA 547							0				
Dominos	UVA 11504							0				Sol
	SRM419-D2-1000							0				
Winning Streak	UVA 11176							0				Sol
	SRM391-D2-1000							0				
	SRM465-D1-500							0				Sol
	UVA 10740							0				Sol
	UVA 12261							0				
	LIVEARCHIVE 4008							0				
	UVA 1342							0				Sol
	CF811-D2-D							0				
	AtCoder026-AGC-B							0				Sol
	SPOJ FISHES							0				Sol
	UVA 11475							0				Sol
								0				
Red-Green Tower	CF478-D2-D							0				
Renting Bikes	CF363-D2-D							0				
Lucky Number 2	CF146-D2-D							0				
Tennis Game	CF496-D2-D							0				
Bubble Sort Graph	CF340-D2-D							0				
Upgrading Array	CF402-D2-D							0				
	ZOJ 3305							0				Sol
	CF1017-D12-D							0				
Game	CF 364-D2-C							0				
Ciel and Robot	CF 365-D2-C							0				
Plus and Square R	CF 366-D2-C							0				
								0				
Boxes in a Line	UVA 12657							0				Sol
	SPOJ QUEST4							0				Sol
Multifactorials	UVA 11347							0				
Crimewave	UVA 563							0				Sol
	SRM545-D2-1000							0				
	SRM495-D1-500							0				
Primitive Root	SPOJ PROQT							0				Sol
Of Zorcs and Axes	CF101149-GYM-G							0				Sol
Connected Comp	CF292-D12-D							0				
AND Rounds	SPOJ ANDROUND							0				Sol
Campus Roads	UVA 11473							0				Sol
The Child and Zoo	CF437-D2-D							0				Sol
	CF403-D1-C							0				
	CF787-D2-C							0				
	CF309-D12-B							0				
	SRM392-D1-1000							0				
	UVA 12128							0				
	Timus 1362							0				Sol
	CF1012-D1-C							0				
	SPOJ COCONUTS							0				Sol

Problem Name	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments About your approach
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0
	FbHkrCup 18-RQ-C							0				
	LIVEARCHIVE 4682							0				Sol
								0				
Image Preview	CF651-D2-D							0				
Maximum Xor Sec	CF281-D2-D							0				
Ilya and Roads	CF313-D2-D							0				
Mr. Bender and Sc	CF255-D2-D							0				
Fish Weight	CF298-D2-D							0				
T-decomposition	CF237-D2-D							0				
Wizards and Huge	CF168-D2-D							0				
	CODECHEF BJUDGE							0				
Dima and Salad	CF 308-D2-C							0				
								0				
Arbitrage	UVA 104							0				Sol
Random Task	CF431-D2-D							0				
Black Box	UVA 501							0				Sol - Must Read
Expressions	UVA 11234							0				Sol
Showstopper	SPOJ MSE07E							0				Read SPOJ users' comments about IO. See here sol
Tobo or not Tobo	SPOJ ANARC08A							0				Sol
Sum-up the Prime	UVA 10419							0				Sol
Largest Rectangle	SPOJ HISTOGRA							0				Sol. Don't implement as adhock/greedy/Pure STL. Use a data structure.
	UVA 663							0				Sol
KingdomReorgan	SRM531-D2-1000							0				
The Problem with	UVA 10092							0				
Psycho	SPOJ PSYCHON							0				
Minimal Ratio Tree	LIVEARCHIVE 4326							0				
RACING	UVA 1234							0				Sol
ActivateGame	SRM470-D2-1000							0				
Pair of Numbers	CF359-D2-D							0				Sol
Nuts for nuts	UVA 10944							0				
Probability	Uva 11346							0				Sol
	SRM470-D1-500							0				
	SPOJ COCONUTS							0				Sol
	CF592-D2-D							0				
	UVA 1218							0				Sol
	SPOJ IOPC1207							0				Sol
	CF867-D12-E							0				
								0				
AlgoRace	CF189-D2-D							0				Sol
Modular Arithmet	CF604-D2-D							0				Sol
Lucky Transforma	CF122-D2-D							0				
Boring Partition	CF239-D2-D							0				Sol. Find proof.(See editorial comments)
Spongebob and S	CF599-D2-D							0				
How many trees?	CF9-D2-D							0				
	CF1043-D12-E							0				
	UVA 10982							0				Sol
	CF1060-D12-D							0				
Cthulhu	CF 104-D2-C							0				
Anya and Ghosts	CF 308-D2-C							0				
Square Subsets	CF 448-D2-C							0				
								0				
Angry Programme	UVA 11506							0				Sol
The New Rule in E	UVA 10742							0				Sol
Multiples of 3	SPOJ MULTQ3							0				Sol
TimeTravellingSal	SRM492-D2-1000							0				
March of the Peng	UVA 12125							0				Sol
PeopleYouMayKn	SRM447-D1-500							0				Don't use DP. Check it later in editorial. Sol
The Game of 31	UVA 10578							0				Sol
Can you answer th	SPOJ GSS4							0				Sol
Area	TJU 1011							0				Sol
Volatile Kite	CF801-D2-D							0				Sol
Antifloyd	UVA 10987							0				Sol
Messenger	CF631-D2-D							0				
	SRM144-D1-500							0				
	SRM509-D1-500							0				
	CF280-D1-C							0				
	CF110-D2-D							0				
	CF163-D12-C							0				
	CF455-D1-B							0				
								0				
Infinite Maze	CF197-D2-D							0				
Jeff and Furk	CF352-D2-D							0				Sol
Sagheer and Kind	CF812-D2-D							0				Sol
Dispute	CF242-D2-D							0				
Remainders Game	CF688-D2-D							0				
	CF1075-D2-D							0				
	CF1033-D12-D							0				
	CF442-D1-B							0				
	CF1025-D2-D							0				
	CF1072-D2-D							0				

ff	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments about your approach is interesting?	Mostafa Category	Category Code	Level	Quality
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0				
		This page has the SAME problems in (CF-A to CF-D3). It has problems categories, levels and quality (last 4 columns)														
		Some trainees don't like to train using Blind Order style (CF-A to CF-D3) and prefer Topics-Based style														
		This sheet page is another training style. Determine a category, go ahead and solve in order. Read Info Page. Read end of this page.														
Vanya and Fence	CF677-D2-A							0				C++ Solution Example	adhoc, NA	1	0.5	
Anton and Danik	CF734-D2-A							0				This is from Round 379. Here is the editorial	adhoc, NA	1	0.6	
Petya and Strings	CF112-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1	
Is your horseshoe	CF228-D2-A							0				Video Solution - Eng Ahmead Raafat (Python)	adhoc, NA	1	1	
Team	CF231-D2-A							0				Video Solution - Eng Youssef Ali	adhoc, NA	1	1	
Boy or Girl	CF236-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1	
Beautiful Matrix	CF263-D2-A							0				Video Solution - Eng Samed Hajajla	adhoc, NA	1	1	
Colorful Stones (S	CF265-D2-A							0				Video Solution - Eng Ahmead Raafat (Python)	adhoc, NA	1	1	
Stones on the Tab	CF266-D2-A							0				Video Solution - Eng Ahmead Raafat (Python)	adhoc, NA	1	1	
Games	CF268-D2-A							0				Video Solution - Eng Yahia Ashraf	adhoc, NA	1	1	
Word Capitalizatio	CF281-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1	
Magnets	CF344-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1	
Sereja and Dima	CF381-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1	
Gravity Flip	CF405-D2-A							0				Video Solution - Eng John Gamal	adhoc, NA	1	1	
Police Recruits	CF427-D2-A							0				Video Solution - Eng Ahmead Raafat (Python)	adhoc, NA	1	1	
Black Square	CF431-D2-A							0				Video Solution - Eng Ahmead Raafat (Python)	adhoc, NA	1	1	
Word	CF59-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1	
Night at the Museu	CF731-D2-A							0				Video Solution - Eng Yahia Ashraf	adhoc, NA	1	1	
Buy a Shovel	CF732-D2-A							0				Video Solution - Eng Yahia Ashraf	adhoc, NA	1	1	
Bear and Big Broth	CF791-D2-A							0				Video Solution - Eng Youssef El Ghareeb	adhoc, NA	1	1	
Good Number	CF365-D2-A							0				Video Solution - Eng Muntaser Abukadeja	adhoc	1	1.5	
Snow Footprints	CF298-D2-A							0				Video Solution - Dr Mostafa Saad	adhoc	1	1.5	
String Task	CF118-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Presents	CF136-D2-A							0				Video Solution - Eng Ahmed Raafat (Python)	adhoc, NA	1	1.5	
Next Round	CF158-D12-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Twins	CF160-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Dubstep	CF208-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Mountain Scenery	CF218-D2-A							0				Video Solution - Eng John Gamal	adhoc, NA	1	1.5	
Dice Tower	CF225-D2-A							0				Video Solution - Eng Muntaser Abukadeja	adhoc, NA	1	1.5	
Fancy Fence	CF270-D2-A							0				Video Solution - Eng Omar Ashraf	adhoc, NA	1	1.5	
Bit++	CF282-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
IQ Test	CF287-D2-A							0				Video Solution - Dr Mostafa Saad	adhoc, NA	1	1.5	
Polo the Penguin	CF289-D2-A							0				Video Solution - Dr Mostafa Saad	adhoc, NA	1	1.5	
Shaass and Oskol	CF294-D2-A							0				Video Solution - Dr Mostafa Saad	adhoc, NA	1	1.5	
Yaroslav and Perr	CF296-D2-A							0				Video Solution - Dr Mostafa Saad	adhoc, NA	1	1.5	
Even Odds	CF318-D2-A							0				Video Solution - Eng Muntaser Abukadeja	adhoc, NA	1	1.5	
Helpful Maths	CF339-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Ksenia and Pan St	CF382-D2-A							0				Video Solution - Eng Samed Hajajla	adhoc, NA	1	1.5	
Translation	CF41-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Football	CF43-D2-A							0				Video Solution - Eng Belal Abdulnasser (Python)	adhoc, NA	1	1.5	
Anton and Letters	CF443-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Laptops	CF456-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
I Wanna Be the Gr	CF469-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Keyboard	CF474-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Counterexample	CF483-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Calculating Functi	CF486-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Team Olympiad	CF490-D2-A							0				Video Solution - Eng Muntaser Abukadeja	adhoc, NA	1	1.5	
Chewbacca and N	CF514-D2-A							0				Video Solution - Eng Muntaser Abukadeja	adhoc, NA	1	1.5	
Pangram	CF520-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Case of the Zeros	CF556-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Lineland Mail	CF567-D2-A							0				Video Solution - Eng Ahmed Raafat (Python)	adhoc, NA	1	1.5	
Raising Bacteria	CF579-D2-A							0				Video Solution - Eng Ahmed Raafat (Python)	adhoc, NA	1	1.5	
Olesya and Rodior	CF584-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Alyona and Numb	CF682-D2-A							0				Video Solution - Eng John Gamal	adhoc, NA	1	1.5	
Free Ice Cream	CF686-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Young Physicist	CF69-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Launch of Collider	CF699-D2-A							0				Video Solution - Eng Samed Hajajla	adhoc, NA	1	1.5	
Brain's Photos	CF707-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Way Too Long Wo	CF71-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Arpa's hard exam	CF742-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Mahmoud and Lor	CF766-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Snacktower	CF767-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Oath of the Night's	CF768-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
New Password	CF770-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Carrot Cakes	CF799-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Panoramix's Predi	CF80-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Is it rated?	CF807-D2-A							0				Video Solution - Solver to be (Java)	adhoc, NA	1	1.5	
Die Roll	CF9-D2-A							0				Video Solution - Eng Muntaser Abukadeja	adhoc, NA	1	1.5	
Electricity	UVA 12148							0				Learn Calender Leap Year	adhoc, calender, leap year	1	2	p1
Final Standings	TIMUS 1100							0				Stable sort exercise	adhoc, stable sort	1	2	p1
President's Office	CF6-D2-B							0				Video Solution - Eng Muntaser Abukadeja	adhoc, stl	1	2	
Sum of Digits	CF102-D2-B							0				Video Solution - Eng Muntaser Abukadeja	adhoc, NA	1	2	
Meeting	CF144-D2-B							0				Video Solution - Eng Muntaser Abukadeja	adhoc, NA	1	2	
Steps	CF152-D2-B							0				Video Solution - Eng Muntaser Abukadeja	adhoc, NA	1	2	
Burglar and Match	CF16-D2-B							0				Video Solution - Eng Muntaser Abukadeja	adhoc, NA	1	2	
Growing Mushroor	CF186-D2-B							0				Video Solution - Eng Mohamed Salah	adhoc, NA	1	2	
Olympic Medal	CF215-D2-B							0				Video Solution - Eng Ahmed Salah	adhoc, NA	1	2	
Effective Approach	CF227-D2-B							0				Video Solution - Eng Abanob Ashraf	adhoc, NA	1	2	
Roma and Changi	CF262-D2-B							0				Video Solution - Eng Mohamed Salah	adhoc, NA	1	2	
Routine Problem	CF337-D2-B							0				Video Solution - Eng Mohamed Adel	adhoc, NA	1	2	
Jeff and Periods	CF352-D2-B							0				Video Solution - Eng Muntaser Abukadeja	adhoc, NA	1	2	
I.O.U.	CF376-D2-B							0				Video Solution - Eng Abanob Ashraf	adhoc, NA	1	2	
Multitasking	CF384-D2-B							0					adhoc, NA	1	2	
Bear and Strings	CF385-D2-B							0				Video Solution - Eng Mohamed Salah	adhoc, NA	1	2	
Inna and New Mat	CF400-D2-B							0				Video Solution - Eng Mohamed Salah	adhoc, NA	1	2	
Mashmokh and To	CF415-D2-B							0				Video Solution - Eng Salma Yehia	adhoc, NA	1	2	
Pasha Maximizes	CF435-D2-B							0				Video Solution - Eng Hossam Yehia	adhoc, NA	1	2	
DZY Loves Chemi	CF445-D2-B							0					adhoc, NA	1	2	
Suffix Structures	CF448-D2-B							0				Video Solution - Eng Mohamed Salah	adhoc, NA	1	2	
Chat Online	CF469-D2-B							0				Video Solution - Eng Mohamed Adel	adhoc, NA	1	2	
Coins	CF47-D2-B							0				Video Solution - Eng Samed Hajajla	adhoc, NA	1	2	
OR in Matrix	CF486-D2-B							0					adhoc, NA	1	2	

ff	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments about your approach is interesting?	Mostafa Category	Category Code	Level	Quality
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0				
Vasya and Wrestiti	CF493-D2-B							0					adhoc, NA	1	2	
Secret Combinatio	CF496-D2-B							0					adhoc, NA	1	2	
Mr. Kitayuta's Colc	CF505-D2-B							0				Video Solution - Eng Muntaser Abukadeja	adhoc, NA	1	2	
Fox And Two Dots	CF510-D2-B							0				Video Solution - Eng Mohamed Adel	adhoc, NA	1	2	
Pasha and String	CF525-D2-B							0				Video Solution - Eng Hossam Yehia	adhoc, NA	1	2	
Sea and Islands	CF544-D2-B							0				Video Solution - Eng Mohamed Salah	adhoc, NA	1	2	
Kefa and Compan	CF580-D2-B							0				Video Solution - SolverToBe (Java)	adhoc, NA	1	2	
Kolya and Tanya	CF584-D2-B							0				Video Solution - Eng Yahia Ashraf	adhoc, NA	1	2	
Approximating a C	CF602-D2-B							0					adhoc, NA	1	2	
Hamming Distanc	CF608-D2-B							0					adhoc, NA	1	2	
Petya and Country	CF66-D2-B							0				Video Solution - Eng Muntaser Abukadeja	adhoc, NA	1	2	
Bear and Finding	CF680-D2-B							0				Video Solution - Eng Muntaser Abukadeja	adhoc, NA	1	2	
Filya and Homewo	CF714-D2-B							0				Video Solution - Eng Muntaser Abukadeja	adhoc, NA	1	2	
Complete the Won	CF716-D2-B							0				Video Solution - Eng Mohamed Salah	adhoc, NA	1	2	
Easter Eggs	CF78-D2-B							0				Video Solution - Eng Abanob Ashraf	adhoc, NA	1	2	
Hopscotch	CF141-D2-B							0					adhoc, NA	1	2	
Physics Practical	CF253-D2-B							0				Video Solution - Eng Mohamed Salah	adhoc, NA	1	2	
Little Girl and Gam	CF276-D2-B							0				Video Solution - Eng Hossam Yehia	adhoc, NA	1	2	
Painting Eggs	CF282-D2-B							0					adhoc, NA	1	2	
Fence	CF363-D2-B							0				Video Solution - Eng Muntaser Abukadeja	adhoc, prefix sum	1	2	
Valera and Contes	CF369-D2-B							0				Video Solution - Eng Yahia Ashraf	adhoc, NA	1	2	
Han Solo and Lazr	CF514-D2-B							0					adhoc, NA	1	2	
Two Buttons	CF520-D2-B							0				Video Solution - Solver to be (Java)	adhoc, NA	1	2	
Tavas and SaDDa	CF535-D2-B							0				Video Solution - Eng Abanob Ashraf	adhoc, NA	1	2	
Preparing Olympia	CF550-D2-B							0				Video Solution - SolverToBe (Java)	adhoc, NA	1	2	
Lovely Palindrome	CF688-D2-B							0				Video Solution - Solver to be (Java)	adhoc, NA	1	2	
Anatoly and Cockr	CF719-D2-B							0					adhoc, NA	1	2	
Decoding	CF746-D2-B							0				Video Solution - Solver to be (Java)	adhoc, NA	1	2	p2
Bear and Friendsh	CF791-D2-B							0				Video Solution - Eng Mohamed Salah	adhoc, NA	1	2	
Keyboard	CF88-D2-B							0				Video Solution - Eng Muntaser Abukadeja	adhoc, NA	1	2	p2
Kuriyama Mirai's S	CF433-D2-B							0					adhoc, prefix sum	1	2	
Vika and Squares	CF610-D2-B							0					adhoc, prefix sum	1	2	
	CF1237-D12-B							0					adhoc, prefix sum	1	3	p3
Alyona and mex	CF740-D2-C							0				Video Solution - Dr Mostafa Saad	adhoc, constructive	1	3	p2
	UVA 11053							0				Find O(n) Solution	adhoc, cycle detection for iterated function	1	3	p1
Karen and Coffee	CF816-D2-B							0					adhoc, prefix sum	1	4	p5
	CF1043-D12-C							0					adhoc, constructive	1	4	p3
	CF1075-D2-C							0					adhoc, constructive, sweep	1	4	p3
	CF1237-D12-C2							0					adhoc, constructive	1	4	p3
Molly's Chemicals	CF776-D2-C							0				Video Solution - Solver to be (Java)	adhoc	1	4	p2
Number of Ways	CF466-D2-C							0				Video Solution - Solver to be (Java)	adhoc	1	4	p2
	SPOJ TWINSNOW							0				Sol - text clarification	adhoc, canonical form, [unclear text]	1	4	p1
	UVA 10920							0					adhoc, coordinate systems, math or simulat	1	4	p1
	SRM381-D2-1000							0					adhoc, sorting, [bubble sort]	1	4	p1
Cutting Figure	CF194-D2-C							0					adhoc	1	4	
Hacker, pack your	CF822-D2-C							0				Video Solution - Solver to be (Java)	adhoc	1	4	
Greg and Array	CF296-D2-C							0					adhoc, prefix sum	1	4	
	CF1066-D3-E							0					adhoc, string, math	1	4.25	p3
Almost Equal	CF1206-D2-C							0				Video Solution - Dr Mostafa Saad	adhoc, constructive	1	4.25	p3
Permutations	CF189-D2-C							0				Sol	adhoc	1	4.5	
	SRM274-D1-500							0					adhoc, canonical form, bf or greedy	1	4.5	p2
Array Division	CF808-D2-D							0				Video Solution - Solver to be (Java)	adhoc, string prefix	1	4.5	p1
Prime Permutation	CF124-D2-C							0					adhoc, constructive	1	4.5	
Try and Catch	CF195-D2-C							0				Editorial - Eng Ahmed Osama	adhoc, string parsing	1	4.5	
Title	CF59-D2-C							0					adhoc, string parsing	1	4.5	
	CF309-D1-C							0					adhoc, binary search, bitmasks or rmq	1	5	p3
	SPOJ KOMPICI							0					adhoc, bitmasks, [=spoj iitkwpch]	1	5	p3
Lucky Transforma	CF122-D2-D							0					adhoc, impl	1	5	p3
	SPOJ PARSUMS							0				Sol	adhoc, cyclic shifts, partial sum or segment	1	5	p2
	CODECHEF OPPOSITI							0					adhoc	1	5	p2
	SRM321-D1-500							0				See Rushiose's code in arena summary	adhoc, sorting, [print the smallest lexicograg	1	5	p2
Fish Weight	CF288-D2-D							0					adhoc	1	5	
Dividing Island	CF63-D2-D							0					adhoc	1	5	
Median Smoothing	CF591-D2-C							0				Editorial	adhoc, constructive, impl	1	5	
	CF23-D12-C							0					adhoc, sortings, overflow	1	5.25	p3
	CF101589-GYM-F							0				Sol	adhoc	1	5.75	
	Alcorder92-ARC-B							0					adhoc, bitmasks, binary search	1	6	p3
23 out of 5	UVA 10344							0				Video Solution - Eng Mohamed Nasser	backtrack	2	2	
8 Queens Chess F	UVA 750							0				Video Solution - Eng Ayman Salah	backtrack	2	4	
Graph Coloring	UVA 193							0				Video Solution - Dr Mostafa Saad	backtrack, graph, maximum independent se	2	4	
Safe	CF47-D2-D							0					backtrack, datastructures, impl	2	5	p3
Jimmi's Riddles	UVA 10058							0				Sol	backtrack, expression parsing	3	4	p3
Grammar Evaluati	UVA 622							0				Sol	backtrack, expression parsing, [cnf]	3	5	p4
Help Vasilisa the V	CF143-D2-A							0				Video Solution - Eng John Gamal	bf	5	1.5	
Gerald is into Art	CF560-D2-B							0					bf	5	2	
Simple Game	CF570-D2-B							0					bf	5	2	
Students and Shor	CF129-D2-B							0				Video Solution - Eng Abanob Ashraf	bf	5	2	
Balls Game	CF430-D2-B							0					bf, two pointers	5	3	p2
Cut Ribbon	CF189-D2-A							0				Video Solution - Solver to be (Java)	bf	5	3	
Searching for Gra	CF402-D2-C							0					bf, constructive	5	3	
Bulls and Cows	CF63-D2-C							0				Sol	bf, impl	5	4	p2
Almost Arithmetica	CF255-D2-C							0					bf	5	4	
Fancy Number	CF118-D2-C							0					bf or greedy	5	4	
Recycling Bottles	CF672-D2-C							0					bf or greedy	5	4	
Devu and Partition	CF439-D2-C							0					bf, constructive, impl	5	4	
Football Champion	CF200-D2-C							0					bf, impl	5	4	
Sereja and Algorit	CF368-D2-C							0					bf, impl	5	4	
Arthur and Table	CF557-D2-C							0					bf, datastructures	5	4.5	
	CF1036-D2-C							0					bf, combinatorics	5	4.5	p2
Matrix	CF365-D2-C							0					bf, math	5	4.5	p1
Removing Column	CF496-D2-C							0				Video Solution - Dr Mostafa Saad	bf	5	4.5	
	UVA 12261							0					bf, [cases]	5	5	p3
	UVA 10705							0				Sol	bf, prune, binary base, bitmasks	5	5	p3
Lucky Number 2	CF146-D2-D							0					bf, impl or greedy	5	5	p2
Levko and Array R	CF361-D2-C							0					bf or greedy	5	5	p2
	CF1017-D12-D							0					bf, bitmasks or dp_adhoc	5	5.5	p3

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	AC Averages =>	0	0	0	0	0	0	0	0	0	0					
	CF621-D2-D							0				Sol	bf, math, logs, [one solution use complex n	5	5.5	p2
	SRM513-D2-1000							0					bf or dp	5	5.5	p2
	CF633-D12-D							0					bf, hashing, impl, [idea that functions like fit	5	5.5	p2
	SRM525-D1-500							0					bf, graph, bitmasks	5	5.5	p3
Pipeline	CF287-D2-B							0				Video Solution - Dr Mostafa Saad	binary search	6	2.5	
Vanya and Lanterr	CF492-D2-B							0				Video Solution - Solver to be (Java)	binary search, doubles	6	2.5	p2
Aggressive cows	SPOJ AGGRCOW							0				Video Solution - Eng Youssef El Ghareeb	binary search	6	3	
Hanoi Tower Troubl	UVA 10276							0				Video Solution - Eng Mahmoud Adel	binary search or simulation	6	3.5	
The Stern-Brocot t	UVA 10077							0					binary search, gcd	6	3.5	
Magical Boxes	CF270-D2-C							0					binary search, greedy, math, impl	6	4	p3
Image Preview	CF651-D2-D							0					binary search, bf, left-right trick	6	4	p2
Sagheer and Nubi	CF812-D2-C							0				Video Solution - Solver to be (Java)	binary search	6	4	
The Playboy Chim	UVA 10611							0				Video Solution - Eng Ayman Salah	binary search	6	4	
Modified GCD	CF75-D2-C							0				Video Solution - Dr Mostafa Saad	binary search, math	6	4	p2
Dictionary Subseq	SPOJ DICTSUB							0				Sol	binary search, lower bound	6	4.5	p2
Mr. Bender and Sc	CF255-D2-D							0					binary search	6	4.5	p1
	CF1060-D12-C							0					binary search, two pointers, amortized ana	6	5	p3
Multiplication Tabl	CF448-D2-D							0				Video Solution - Solve to be (Java)	binary search	6	5	p2
Garland	UVA 1555							0				Sol	binary search, math or formula	6	5	p3
	SPOJ ABA12E							0				Sol	binary search, [counting subarrays with sun	6	5.5	p3
Showstopper	SPOJ MSE07E							0				Read SPOJ users' comments about IO. See here	binary search, d&c, [issues in io, seems diff	6	6	p3
	SRM319-D1-500							0					bst, greedy, combinatorics	8	5.5	p2
	SPOJ POSTERIN							0				Sol	datastructures, stack	9	3	p4
Knight Tournamen	CF357-D2-C							0					datastructures, set	9	3	
	LiveArchive 8078							0				Sol	datastructures, stack or dp, [count the longe	9	4	p4
Queue	CF92-D2-D							0					datastructures, grid compress	9	4	p2
Thor	CF705-D2-C							0					datastructures, impl	9	4	p2
Database	UVA 1592							0					datastructures, multimap, hashing, bf	9	4	p2
Little Girl and Maxi	CF276-D2-C							0					datastructures, impl, sortings	9	4	
Anya and Smartph	CF518-D2-C							0					datastructures, impl	9	4.5	
Lorenzo Von Matte	CF697-D2-C							0					datastructures, impl, trees	9	4.5	
Weird Function	SPOJ WEIRDFN							0				Sol	datastructures, heap, min_max heaps, [rest	9	5	p4
Black Box	UVA 501							0				Sol - Must Read	datastructures, heap, min_max or bbst or si	9	5	p2
The SetStack Corr	LiveArchive 3634							0				Sol	datastructures, sets intersections and union	9	5	p2
	CF899-D2-E							0					datastructures, lists or sets merging	9	5.5	p3
Mike and Feet	CF548-D2-D							0					datastructures, stack or rmq or segment tre	9	5.5	p2
Boxes in a Line	UVA 12657							0				Sol	datastructures, linked list, impl	9	5.5	p1
Expressions	UVA 11234							0				Sol	datastructures, stack & queue	9	6	p2
	UVA 11997							0				Sol	datastructures, heap, [counting subarrays w	9	6.25	p4
Cutting Sticks	UVA 10003							0					dp, [use scanf, you may need to avoid mem	10	3	p2
Dividing coins	UVA 562							0				Video Solution - Eng Ayman Salah	dp	10	3	
Vacation	UVA 10192							0				Explained in the tutorial videos	dp, lcs	10	3	
Divisibility	UVA 10036							0					dp, math	10	3	
Longest Match	UVA 10100							0					dp, lcs	10	3.5	
	CF1057-D12-C							0					dp, 2d grid	10	4	p2
Alternative Thinkin	CF604-D2-C							0					dp or greedy	10	4	p2
String to Palindron	UVA 10739							0				Explained in the tutorial videos	dp	10	4	
Trouble of 13-Dots	UVA 10819							0					dp, [knapsack]	10	4	
Woodcutters	CF545-D2-C							0					dp, dp_memo	10	4	
Counting	UVA 10198							0				Needs Big Integer, Have it in your cpp library or	dp, graph, cc	10	4	
Given Length and	CF489-D2-C							0					dp, greedy, impl	10	4	
Strategic Defense	UVA 497							0				Explained in the tutorial videos	dp, lis, [direct lis]	10	4	
Hard problem	CF706-D2-C							0					dp	10	4.5	p1
Boredom	CF456-D2-C							0					dp	10	4.5	
Coloring Trees	CF711-D2-C							0				Video Solution - Solver to be	dp	10	4.5	
Again Palindrome	UVA 10617							0				Sol to read	dp	10	4.5	
Scheduling Lectur	UVA 607							0				Sol	dp	10	4.5	
Divide by Three	CF792-D2-C							0				Video Solution - Solver to be (Java)	dp, dp_memo or greedy	10	4.5	
Wavio Sequence	UVA 10534							0				Sol	dp, lis efficient, lis indices or segment tree	10	5	p3
Good Sequences	CF265-D2-D							0					dp, sieve, binary search	10	5	p3
Dima and Salad	CF366-D2-C							0					dp, knapsack	10	5	p2
	CF101-D1-B							0				Sol	dp, datastructures or binary search, impl	10	5	p2
Bubble Sort Graph	CF340-D2-D							0					dp, lis, onlong, reduce to efficient lis or dp, t	10	5	p2
	CF506-D1-A							0					dp, observation	10	5	p2
Barcode	CF225-D2-C							0				Video Solution - Dr Mostafa Saad	dp	10	5	
Vacations	CF699-D2-C							0					dp	10	5	
Greenhouse Effect	CF270-D2-D							0					dp, lcs, analysis	10	5	
Journey	CF721-D2-C							0					dp, graph or dijkstra	10	5	p2
	CF264-D1-C							0					dp, [non standard]	10	5.5	p4
Cow Program	CF284-D2-D							0					dp, analysis	10	5.5	p3
	CF1066-D3-F							0					dp, cases	10	5.5	p3
Optimal Array Mult	UVA 348							0				Sol	dp, mcm	10	5.5	p3
	SRM569-D2-1000							0					dp, primes	10	5.5	p3
Ilya and Roads	CF313-D2-D							0					dp, tree	10	5.5	p3
	TIMUS 1156							0					dp, bicoloring, is bipartite	10	5.5	p2
Coloring Brackets	CF149-D2-D							0				Sol	dp, dp_conting, dp_ranges	10	5.5	p2
	CF1012-D1-C							0					dp, [non standard]	10	5.5	p2
	CF623-D1-B							0					dp, gcd	10	5.75	p4
	CF1072-D2-D							0					dp, greedy	10	5.75	p3
	CF1025-D2-D							0					dp, d&c	10	6	p2
	FbHkrCup 18-R1-A							0					dp, dp_adhoc, [non standard]	11	5	p2
Kefa and Dishes	CF580-D2-D							0				Video Solution - Solver to be	dp, dp_bitmasks	13	4	p2
Permutations	SPOJ PERMUT1							0					dp, dp_bitmasks	13	4	p2
Assignments	SPOJ ASSIGN							0					dp, dp_bitmasks	13	4	p1
Pebble Solitaire	UVA 10651							0					dp, dp_bitmasks	13	4	p1
	UVA 11825							0				Sol	dp, dp_bitmasks, mask-all-subsets, [direct	13	5	p2
Nuts for nuts	UVA 10944							0					dp, dp_bitmasks, tsp or bfs, impl	13	5	
Random Task	CF431-D2-D							0					dp, dp_bitmasks, binary search or adhoc	13	5.5	p3
Shopping Trip	UVA 11284							0				Sol	dp, dp_bitmasks, floyd	13	6	
Gone Fishing	UVA 757							0				Sol to read	dp, dp_build_output	15	3	
Make Palindrome	UVA 10453							0				Sol	dp, dp_build_output, [similar to edit distanc	15	3.5	p3
Fast Food	UVA 662							0					dp, dp_build_output	15	4.5	p2
Palindromic Subse	UVA 11404							0					dp, dp_build_output	15	4.5	
Unidirectional TSP	UVA 116							0					dp, dp_build_output	15	4.5	
Changing a String	CF56-D2-D							0					dp, dp_build_output, [edit distance]	15	4.5	
Caesar's Legions	CF118-D2-D							0					dp, dp_counting	18	3	

ff	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments about your approach is interesting?	Mostafa Category	Category Code	Level	Quality
	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0				
UnsealTheSafe	SRM354-D2-1000							0	0				dp, dp_counting	18	3	
k-Tree	CF431-D2-C							0	0			Video Solution - Solver to be (Java)	dp, dp_counting, dp_trees	18	3.5	
DiceGames	SRM349-D1-500							0	0				dp, dp_counting	18	4	p2
Flowers	CF474-D2-D							0	0			Video Solution - Solver to be (Java)	dp, dp_counting	18	4.5	p2
	SRM428-D2-1000							0	0				dp, dp_counting or perm, adhoc	18	5	p2
	SRM144-D1-500							0	0				dp, dp_counting or math, combinatorics	18	5	
	SRM514-D1-500							0	0				dp, dp_counting, dp_bitmasks	18	6.25	p4
Little Girl and Maxi	CF276-D2-D							0	0			See editorials	dp, dp_digit or impl	22	4.5	p1
Roman and Numb	CF401-D2-D							0	0				dp, dp_digit, dp_bitmasks or adhoc	22	5	p3
Find Pair	CF160-D2-C							0	0				dp, dp_digit or binary search	22	5	
BagsOfGold	SRM228-D1-500							0	0				dp, dp_games, minimax	23	3	p3
Bachet's Game	UVA 10404							0	0			Sol	dp, dp_games	23	3	
RowAndCoins	SRM522-D1-250							0	0				dp, dp_games, dp_bitmasks or adhoc	23	3	
	CF1033-D12-C							0	0				dp, dp_games, [harmonic progression]	23	4	p3
EllysCheckers	SRM534-D1-250							0	0				dp, dp_games, dp_bitmasks or game theor	23	4	
Bag of mice	CF148-D2-D							0	0				dp, dp_games, dp_probability	23	4.5	p2
The Game of 31	UVA 10578							0	0			Sol	dp, dp_games	23	4.5	
Find the Winning A	UVA 10111							0	0			Sol	dp, dp_games or backtrack, minimax (alph	23	5.5	p3
Tennis contest	UVA 12457							0	0			Sol	dp, dp_probability or probability	29	3.5	
First Digit Law	CF54-D12-C							0	0				dp, dp_probability	29	4	p2
France '98	UVA 542							0	0			Sol	dp, dp_probability, [pkpu 3071]	29	4.5	p3
Bad Luck Island	CF540-D2-D							0	0				dp, dp_probability	29	4.5	p2
TestBettingStrate	SRM339-D1-500							0	0				dp, dp_probability	29	4.5	p2
Dice Throwing	UVA 10759							0	0			Sol	dp, dp_probability, counting style	29	4.5	p2
Wizards and Huge	CF168-D2-D							0	0				dp, dp_probability	29	4.5	
	CF28-D12-C							0	0				dp, dp_probability, combinatorics or adhoc	29	5	p3
Check the difficulty	PKU 2151							0	0			Sol	dp, dp_probability	29	5	p3
	CF16-D2-E							0	0				dp, dp_probability, dp_table, masks	29	5	p3
Let's Dance	UVA 10218							0	0			Sol	dp, dp_probability or combinatorics	29	5	p1
Tribbles	UVA 11021							0	0			Sol	dp, dp_probability, dp_table, [independence	29	5.5	p3
Collecting Bugs	PKU 2096							0	0			Sol	dp, dp_probability or math, [hard text for fev	29	5.5	p2
Winning Streak	UVA 11176							0	0			Sol	dp, dp_probability	29	6	
Creating Palindron	UVA 11753							0	0			Video Solution - Eng Aya Elymany	dp, dp_ranges, lcs or backtrack	32	4.5	p3
	CF101294-GYM-I							0	0			Sol	dp, dp_ranges	32	4.5	p1
	SRM441-D1-250							0	0				dp, dp_ranges, [consecutive ranges, cyclic p	32	5	p2
	SRM536-D2-1000							0	0				dp, dp_ranges, [consecutive ranges]	32	5	p1
MessageMess	SRM149-D1-500							0	0				dp, dp_ranges, impl, [consecutive ranges]	32	5	
	SRM555-D2-1000							0	0				dp, dp_ranges, [consecutive ranges]	32	5	
	SRM558-D1-250							0	0				dp, dp_ranges, [consecutive ranges] or bf	32	5.5	p2
Exploring Pyramid	UVA 1362							0	0			Video Solution - Eng Ayman Salah	dp, dp_ranges	32	5.5	
Brackets sequenc	UVA 1626							0	0			Sol	dp, dp_ranges	32	5.5	
	SRM509-D1-500							0	0				dp, dp_ranges, floyd, [cases]	32	6	p4
	UVA 507							0	0				dp, dp_subrectangle, 1d, [more direct uva	36	3	
	UVA 10667							0	0				dp, dp_subrectangle, 2d	36	3	
Big Maximum Sum	CF75-D2-D							0	0				dp, dp_subrectangle, 2d, [actually greedy v	36	5	p2
	SPOJ FISHES							0	0			Sol	dp, dp_subrectangle, 2d, observations, dot	36	5.5	p3
Reberland Linguist	CF667-D2-C							0	0				dp, dp_table	37	4.5	p3
Red-Green Tower	CF478-D2-D							0	0				dp, dp_table, dp_roll	37	5	p3
Cunning Gena	CF418-D1-B							0	0				dp, dp_table, dp_roll, dp_bitmasks, sortings	37	5.5	p4
	ZOU 3305							0	0			Sol	dp, dp_table or dp_bitmasks, all submasks	37	5.5	p4
An overnight danc	CF814-D2-D							0	0			Video Solution - Solver to be (Java)	dp, dp_trees, geometry or greedy	38	5	p3
	CF161-D12-D							0	0			Reading: DP on Trees	dp, dp_trees or dsu-on-trees	38	5	p2
Vertex Cover	SPOJ PT07X							0	0			Sol	dp, dp_trees	38	5	
	CF337-D2-D							0	0			Sol	dp, dp_trees or diameter like, [tricky to guet	38	5.5	p4
Chloe and please	CF743-D2-D							0	0				dp, dp_trees	38	5.5	p2
	Timus 1362							0	0			Sol	dp, dp_trees or greedy	38	5.5	p2
	UVA 1218							0	0			Sol	dp, dp_trees, [vertex cover releated]	38	5.75	p2
Playing Cubes	CF257-D2-B							0	0				game theory, greedy	41	2.5	
Euclid's Game	UVA 10368							0	0			Video Solution - Eng Moaz Rashad	game theory, gcd, dfs or pattern, [why each	41	3.5	p2
	CF1220-D12-C							0	0				game theory, adhoc	41	3.5	p2
Alice and Bob	CF347-D2-C							0	0			Video Solution - Eng Mohamed Nasser	game theory, gcd	41	4	p1
Win or Freeze	CF151-D2-C							0	0			Video Solution - Dr Mostafa Saad	game theory, divisors, greedy	41	4	p1
Brownie Points	UVA 10865							0	0			Video Solution - Eng Magdy Hasan	geometry	45	2	p1
	SRM436-D2-500							0	0				geometry, [slopes comparison]	45	3	p1
Points in Figures: I	UVA 478							0	0				geometry	45	3	
Watering Flowers	CF617-D2-C							0	0				geometry, bf	45	3	
Pouring Rain	CF667-D2-A							0	0				geometry, physics	45	3	
Fourth Point !!	UVA 10242							0	0			Video Solution - Eng Magdy Hasan	geometry, vectors addition	45	3	
Captain Marmot	CF474-D2-C							0	0			Video Solution - Dr Mostafa Saad	geometry, check square, point rotation, bf	45	3.5	p2
Overlapping Recta	UVA 460							0	0			Video Solution - Eng Muntaser Abukadeja	geometry	45	3.5	
Xrange's Pancake	HACKR xrange-and-piz							0	0			Sol	geometry, adhoc	45	4	p2
	HACKR a-circle-and-a-s							0	0				geometry, ccw, parametric equ, in circle	45	4	p2
	SPOJ FACENEMY							0	0			Sol	geometry, angles, precision	45	4	p1
k-Multiple Free Se	CF275-D2-C							0	0				geometry	45	4	
Gerald's Hexagon	CF560-D2-C							0	0				geometry	45	4	
View Angle	CF257-D2-C							0	0			Editorial - Eng Ahmed Osama	geometry, angles	45	4	
Watchmen	CF651-D2-C							0	0				geometry, datastructures	45	4	
Bicycle Race	CF659-D2-D							0	0				geometry, impl, [very nice, o(1) and o(n) sol	45	4.5	p3
Pyramids	SPOJ PIR							0	0			Sol	geometry, formula or matrix determinant	45	4.5	p1
Pythagorean Triple	CF707-D2-C							0	0				geometry, triangles, formula	45	4.5	p2
	SPOJ BILLIARD							0	0			Sol	geometry, angles, physics	45	5	
Cupboard and Ball	CF342-D2-C							0	0				geometry	45	5	p3
	CF1064-D2-E							0	0				geometry, binary search, interactive	45	5	p3
	CF961-D12-D							0	0				geometry	45	5	p2
	CF101917-D12-E							0	0				geometry, [ppl scared in contest, but easy]	45	5	p2
	CF552-D2-D							0	0				geometry, bf, counting, treemaps	45	5	p2
	CF1016-D2-E							0	0				geometry, binary search	45	5	p2
	CF1058-D2-D							0	0				geometry, triangles, number theory	45	5	p2
	UVA 1342							0	0			Sol	geometry, plane graph	45	5	
	CF101864-GYM-I							0	0			Sol	geometry, binary search or bf, greedy	45	5.5	p3
	CF80-D2-D							0	0				geometry, probability or algebra	45	5.5	p2
	UVA 11648							0	0			Sol	geometry, trapezoid formula, binary search	45	6	p2
	UVA 1333							0	0			Sol - Text/Background Clarification	geometry, triangles, angles, parallelogram l	45	6	p1
Hit Ball	CF203-D2-D							0	0				geometry, 3d, impl, math, [physics, kinemat	46	5	p2
	UVA 453							0	0			Learn Handling Precisions	geometry, circles, [direct circle intersection,	47	2	
Wifi Access	UVA 12748							0	0			Sol	geometry, circles, distances	47	2	

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	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0				
Rings and Glue	UVA 10301							0				Sol	geometry, circles, dsu	47	3	p1
Square Pegs And	UVA 356							0				Sol to read	geometry, circles	47	3	
The Circumferenc	UVA 438							0				Sol	geometry, circles	47	3	
Points in Figures: I	UVA 477							0				Sol	geometry, circles	47	3.5	
Special Olympics	CF199-D2-B							0					geometry, circles, impl	47	4	
Biathlon	CF84-D2-C							0					geometry, circles, impl	47	4	
Packing polygons	UVA 10005							0				Sol	geometry, circles, polygon, [polygon inside p	47	5	p4
	SRM473-D1-500							0					geometry, circles, triangles, thales' theorem	47	5	p3
	SPOJ ALIENS							0				Sol - Practice on min enclosing circle	geometry, circles, min enclosing circle, [esp	47	5	p2
	CF1059-D2-D							0					geometry, circles, binay search	47	5.25	p3
	HACKR house-location							0				Sol	geometry, circles, algebra, impl	47	5.5	p3
	UVA 10180							0				Sol	geometry, circles, tangents, point on segme	47	5.5	p2
Railway	UVA 10263							0				Sol to read	geometry, lines, distances, [=uva 460]	48	3	p3
Lining Up	UVA 270							0				Video Solution - Eng Mohamed Nasser_Don't Co	geometry, lines, line up	48	3	p3
Campus Roads	UVA 11473							0				Sol	geometry, lines, distances, impl	48	3	p2
Polyline	CF617-D2-D							0					geometry, lines, impl	48	3	
Jack Straws	UVA 273							0				Sol	geometry, lines, intersection, shortest path	48	3	
Isolated Segments	UVA 11343							0				Sol	geometry, lines, intersections	48	3	
Intersecting Lines	UVA 378							0					geometry, lines	48	3.5	
	SRM373-D2-1000							0				Sol	geometry, lines, lines intersection, rectangle	48	4	
Intersecting Line S	UVA 866							0				Sol	geometry, lines, intersections	48	4	
	SRM368-D1-500							0				Sol	geometry, lines, polyline intersection, bf, na	48	4	
Gleaming the Cubi	UVA 737							0				Sol	geometry, lines, intersections	48	4	
Water Falls	UVA 833							0				Sol	geometry, lines, distances, adhoc	48	4	p3
How Many Points	UVA 10790							0				Sol	geometry, lines, intersections, counting, for	48	4	p1
River Crossing	UVA 10514							0				Sol	geometry, lines, distances, floyd	48	5	
BestTriangulation	SRM278-D2-500							0					geometry, polygon, area, [just triangle area:	49	2	
Triangle	CF408-D2-C							0					geometry, polygon	49	4	
	UVA 11665							0				Sol	geometry, polygon, pip, polygons intersecti	49	4	
	TIMUS 1599							0				Sol	geometry, polygon, pip, winding numbers, [i	49	4.5	p1
	UVA 881							0				Sol	geometry, polygon, pip, polygons inside pol	49	4.5	
	CF340-D2-B							0					geometry, polygon, bf	49	5	p2
Volatile Kite	CF801-D2-D							0				Sol	geometry, polygon, binary search	49	5	p2
Polygons	UVA 137							0				Sol	geometry, polygon, pip, intersections or cor	49	5.5	p3
Area	TJU 1011							0				Sol	geometry, polygon, pick's theorem	52	4.5	p1
Trees on My Islan	UVA 10088							0					geometry, polygon, pick's theorem, gcd	52	5	
	LIVEARCHIVE 2831							0				Use polygon cut	geometry, polygon, polygon cut	53	4	
Video Surveillance	UVA 588							0				Use polygon cut	geometry, polygon, polygon cut or adhoc	53	6	p5
The Skyline Proble	UVA 105							0					greedy, geometry		3	
Marcus	UVA 10452							0				Video Solution - Eng Ayman Salah	graph	55	3	
Trees on the level	UVA 122							0				Video Solution - SolverToBe (Java)	graph, trees	55	3	
PT07Z	SPOJ PT07Z							0				Sol	graph, tree diameter	55	3	
Roads in the North	UVA 10308							0				Sol	graph, tree diameter	55	3	
	CF1068-D2-C							0					graph, adhoc	55	4	p2
Eternal Victory	CF61-D2-D							0					graph, greedy	55	4	p2
Is It A Tree?	UVA 615							0					graph, trees	55	4	p1
Mahmoud and Ehc	CF959-D2-C							0				Video Solution - Eng Mohamed Salah	graph, trees, constructive	55	4	
Central Post Office	UVA 12379							0				Sol	graph, tree diameter	55	4	
The Tree Root	UVA 10459							0				Sol	graph, tree diameter	55	4.5	p3
Xor-tree	CF430-D2-C							0					graph, bf	55	5	
Renting Bikes	CF363-D2-D							0					graph, cycle, greedy	55	5	
Regular Bridge	CF550-D2-D							0					graph, prove using e.g. scc	55	5	
	CF486-D2-D							0					graph, trees, dfs, prefix sum or dp_trees	55	5.5	p5
Cycles	CF233-D2-C							0					graph, cycle	55	5.5	p3
	CF459-D2-E							0					graph, dp, sortings	55	5.5	p3
	CF1060-D12-D							0					graph, greedy	55	5.5	p3
	UVA 10982							0				Sol	graph, greedy, [close to max cut]	55	5.5	p3
	CF592-D2-D							0					graph, tree diameter	55	5.5	p3
BITMAP - Bitmap	SPOJ BITMAP							0					graph, bfs, multisc, multidest	57	3	p3
Pouring water	SPOJ POUR1							0				Video Solution - Eng Moaz Rashad	graph, bfs	57	3	
Jugs	UVA 571							0				Video Solution - Dr Mostafa Saad	graph, bfs	57	4	p1
Tic-Tac-Toe (I)	SPOJ TOE1							0				Video Solution - Eng Ayman Salah	graph, bfs	57	4	
Tic-Tac-Toe (II)	SPOJ TOE2							0				Video Solution - Eng Essam AlNaggar	graph, bfs	57	4	
Knight Moves	UVA 439							0				Video Solution - Eng Magdy Hasan	graph, bfs, chess or dfs	57	4	
King's Path	CF242-D2-C							0				Video Solution - Dr Mostafa Saad	graph, bfs	57	4.5	
Theseus and labyr	CF676-D2-D							0					graph, bfs, impl	57	4.5	p2
Wandering Queen	SPOJ QUEEN							0				Sol to read	graph, bfs	57	4.5	p1
Restore Graph	CF404-D2-C							0					graph, bfs	57	4.5	
Key Task	SPOJ CERC07K							0					graph, bfs, bitmask	57	4.5	
Cleaning Robot	SPOJ CLEANRBT							0					graph, bfs, bitmask or bfs preprocess then	57	4.5	
	UVA 10888							0					graph, bfs, dp or weighted matching	57	5	p3
Text Editor	CF253-D2-C							0					graph, bfs or greedy, [search in 2d grid]	57	5	p2
Tobo or not Tobo	SPOJ ANARC08A							0				Sol	graph, bfs, trie, hashing or meet in middle	57	5	
	CF1005-D3-F							0					graph, bfs	57	5.25	p2
	TIMUS 1498							0					graph, bfs, [chess, tricky cases]	57	5.5	p2
	UVA 11573							0				Learn 0/1 BFS	graph, bfs, 0/1 bfs, [~spoj kaththi]	57	5.5	p2
	CF787-D2-C							0					graph, bfs, cyclic games	57	5.5	p1
	CF811-D2-D							0					graph, bfs, interactive	57	6	p2
	UVA 10461							0					graph, dfs, [finish computation times]	60	3	p1
Roads in Berland	CF25-D2-C							0					graph, dfs	60	4	p2
Party	CF116-D2-C							0					graph, dfs	60	4	p1
Forming Teams	CF216-D2-B							0				Video Solution - Dr Mostafa Saad	graph, dfs	60	4	
Block Tower	CF327-D2-D							0					graph, dfs	60	4	
Soldier and Cards	CF546-D2-C							0					graph, dfs	60	4	
Kefa and Park	CF580-D2-C							0				Video Solution - Solver to be (Java)	graph, dfs	60	4	p2
Maze	CF378-D2-C							0					graph, dfs, [reverse thinking]	60	4.5	p1
Exchange Rates	UVA 10113							0					graph, dfs, impl	60	4.5	p1
Ice Cave	CF540-D2-C							0					graph, dfs	60	4.5	
Ordering	UVA 872							0					graph, dfs	60	4.5	
Directed Roads	CF711-D2-D							0					graph, dfs, combinatorics, formula	60	5	p3
	SPOJ BIA							0				Sol	graph, dfs or directed articulation points alg	60	5	p2
Choosing Capital f	CF219-D2-D							0					graph, dfs or dp_trees	60	5	
	CF1079-D2-D							0					graph, dfs, interactive	60	5.5	p3
Infinite Maze	CF197-D2-D							0					graph, dfs	60	5.5	
Cycle in Graph	CF263-D2-D							0					graph, dfs	60	5.5	
T-decomposition	CF237-D2-D							0					graph, dfs, greedy	60	5.5	

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	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0				
Robbery	UVA 707							0				Sol	graph, dfs or dp	60	5.75	
Persistent Bookcase	CF707-D2-D							0				Sol	graph, dfs, bitset or persistent segment tree	60	6	p3
Moodular Arithmet	CF604-D2-D							0				Sol	graph, dfs, fermat, [rearrangement property]	60	6	p2
The Seasonal War	UVA 352							0				Video Solution - Eng Mohamed Nasser	graph, dfs, flood-fill	61	2	
Battleships	UVA 11953							0				Video Solution - Eng Aya Elymany	graph, dfs, flood-fill	61	3.5	
Maze Exploration	UVA 784							0				Video Solution - Eng Mahmoud Adel	graph, dfs, flood-fill	61	3.5	
Continents	UVA 11094							0				Video Solution - Eng Ayman Salah	graph, dfs, flood-fill	61	4	
	SRM297-D1-500							0					graph, dfs, flood-fill or bfs, bf	61	5	p3
Equivalent Strings	CF560-D2-D							0				Sol to learn	graph, dfs, isomorphism or d&c, hashing	62	4	p2
Subway tree syste	LIVEARCHIVE 2935							0				Sol	graph, dfs, isomorphism, canonical form or	62	4.5	p4
Hierarchy	SPOJ MAKETREE							0				Video Solution - Eng Yahia Ashraf	graph, dfs, topological sort	63	2	
Ordering Tasks	UVA 10305							0				Video Solution - Eng Yahia Ashraf	graph, dfs, topological sort	63	3	
	SRM419-D2-1000							0					graph, dfs, topological sort, cycles	63	4	
Spreadsheet	UVA 196							0					graph, dfs, topological sort or dp	63	4	p3
Rankings	UVA 12263							0				Sol	graph, dfs, topological sort	63	4	p2
Pick up sticks	UVA 11686							0				Sol	graph, dfs, topological sort, detect cycles	63	4	
	SRM550-D2-1000							0					graph, dfs, topological sort	63	5	p3
Robot Rapping Re	CF645-D12-D							0					graph, dfs, topological sort, binary search	63	5	p3
Gifts by the List	CF681-D2-D							0					graph, dfs, topological sort, impl	63	5	p2
Sagheer and Kind	CF812-D2-D							0				Sol	graph, dfs, topological sort or euler, [https://	63	6	p4
Shopping	SPOJ SHOP							0					graph, dijkstra	64	3	
Sending email	UVA 10986							0					graph, dijkstra	64	3	
MELE3	SPOJ MELE3							0				Sol	graph, dijkstra	64	4.5	
Roads	SPOJ ROADS							0				Sol	graph, dijkstra or dp	64	4.5	p3
Lift Hopping	UVA 10801							0					graph, dijkstra	64	4.5	
	UVA 10740							0				Sol	graph, dijkstra, kth sp. [k <= 10]	64	5	p3
Volleyball	CF96-D2-D							0					graph, dijkstra, 2 dijkstra	64	5	p2
	UVA 12047							0				Sol	graph, dijkstra	64	5.5	p3
	UVA 10342							0				Sol - read the statement clarification	graph, dijkstra, kth sp (k=2) or floyd	64	5.5	p3
Hotel booking	UVA 11635							0				Sol	graph, dijkstra	64	5.5	
IP-TV	UVA 1174							0					graph, dsu	65	2	
Count the Faces.	UVA 10178							0				Read first Euler Formula	graph, dsu or dfs, cycles	65	4	p2
Learning Language	CF278-D2-C							0					graph, dsu	65	4	
Virtual Friends	UVA 11503							0				Video Solution - Eng Moaz Rashad	graph, dsu	65	4	
Almost Union-Find	UVA 11987							0				Sol	graph, dsu	65	4.5	p3
Cthulhu	CF104-D2-C							0					graph, dsu	65	4.5	
The Child and Zoo	CF437-D2-D							0					graph, dsu	65	5	
Mahmoud and a D	CF766-D2-D							0				Video Solution - Solver to be (Java)	graph, dsu, [offline processing]	65	5	p3
	CF1012-D1-B							0					graph, dsu	65	5.25	p2
	UVA 12128							0					graph, dsu, dijkstra like or binary search, bf	65	5.5	p2
Connected Compc	CF292-D12-D							0					graph, dsu	65	5.75	p3
Trip Routing	UVA 186							0				Sol	graph, floyd, path print	68	4	p3
Numbering Paths	UVA 125							0				Sol	graph, floyd, paths counting	68	4.5	p5
Frogger	UVA 534							0				Sol	graph, floyd, minimax or dsu	68	4.5	p4
Travel in Desert	UVA 10816							0				Sol	graph, floyd, binary search	68	4.5	
Identifying Concur	UVA 334							0					graph, floyd	68	4.5	
Greg and Graph	CF296-D2-D							0					graph, floyd	68	5	p2
Dima and Bacteria	CF400-D2-D							0					graph, floyd, dfs	68	5	p2
AlgoRace	CF189-D2-D							0				Sol	graph, floyd	68	5.25	p4
Antifloyd	UVA 10987							0				Sol	graph, floyd, antifloyd	68	5.5	p4
Unique World	UVA 10448							0				Video Solution - Dr.Mostafa Saad	graph, floyd, dp	68	5.5	p2
Arbitrage	UVA 104							0				Sol	graph, floyd	68	6.25	p2
Potholers	SPOJ POTHOLE							0				Sol	graph, max-flow	71	3	
Power Transmissi	UVA 10330							0				Sol	graph, max-flow, vertex constraints	71	4	
The Problem with	UVA 10092							0					graph, max-flow, [direct bipartite is slow]	71	4.5	p3
Crimewave	UVA 563							0				Sol	graph, max-flow, vertex constraints, sparse	71	5.5	p4
Intergalactic Map	SPOJ IM							0				Sol	graph, max-flow, [vertex disjoint path\ super	71	5.5	p2
A Plug for UNIX	UVA 753							0				Sol	graph, max-flow, impl	71	5.5	p2
March of the Peng	UVA 12125							0				Sol	graph, max-flow, vertex constraints	71	6	
Gopher II	UVA 10080							0				Sol	graph, max-flow, bipartite match	72	4	
Software Allocation	UVA 259							0				Sol	graph, max-flow, bipartite match or impl	72	4.5	
	UVA 670							0				Sol	graph, max-flow, bipartite match	72	5	p3
	UVA 1184							0				Sol	graph, max-flow, bipartite match, min path c	72	5	p2
	UVA 1194							0				Sol	graph, max-flow, bipartite match, min vertex	72	5.5	p4
	UVA 10349							0				Sol - 2 ways	graph, max-flow, bipartite match, max indeg	72	5.5	p3
	UVA 11159							0				Sol	graph, max-flow, bipartite match, min path c	72	5.5	p3
	UVA 12168							0				Sol	graph, max-flow, bipartite match, konig's thm	72	6	p3
	SPOJ QUEST4							0				Sol	graph, max-flow, bipartite match	72	6	p2
	UVA 663							0				Sol	graph, max-flow, bipartite match	72	6	p1
Sabotage	UVA 10480							0				Sol	graph, max-flow, min-cut, [print, as in video]	74	4.5	p1
Unique Attack	ZOJ 2587							0				Sol	graph, max-flow, min-cut, cut edges	74	5	p2
Angry Programme	UVA 11506							0				Sol	graph, max-flow, min-cut, vertex constraints	74	5.25	p3
	PeopleYouMayKnow							0				Don't use DP. Check it later in editorial. Sol	graph, max-flow, min-cut or dp	74	5.5	p3
	SPOJ COCONUTS							0				Sol	graph, max-flow, min-cut	74	6	p3
	SRM465-D1-500							0				Sol	graph, max-flow, min-cut	74	6.25	p3
Highways	UVA 10147							0				Video Solution - Eng Mahmoud Adel	graph, mst	76	3	
Is There A Second	UVA 10462							0					graph, mst, 2nd mst	76	3	
	UVA 10843							0				Theory result to read	graph, mst, # of spanning trees of complete	76	4	p2
ACM contest and f	UVA 10600							0				Video Solution - Eng Moaz Rashad	graph, mst, 2nd mst	76	4.5	p1
	TimeTravellingSailor							0					graph, mst	76	5	p3
	CF472-D12-D							0					graph, mst, [cases], [validate tree]	76	5	p3
RACING	UVA 1234							0				Sol	graph, mst, max spanning tree	76	5	p2
Arctic Network	UVA 10369							0					graph, mst, [prime fails]	76	5	p2
KingdomReorganize	SRM531-D2-1000							0					graph, mst	76	5	p1
Lazy Student	CF606-D2-D							0					graph, mst	76	5	
ActivateGame	SRM470-D2-1000							0					graph, mst	76	5.25	
Minimal Ratio Tree	LIVEARCHIVE 4326							0					graph, mst, combinatorics	76	6	
The Bottom of a G	SPOJ BOTTOM							0				Sol	graph, scc	77	3	
Test	UVA 10731							0				Sol	graph, scc	77	3.5	
Dominos	UVA 11504							0				Sol	graph, scc or topological sort, [uva 11770,	77	4.5	p1
	CF467-D2-D							0					graph, scc, hashing or dijkstra	77	5	
	SRM312-D1-500							0					graph, scc, greedy, [scc floyd]	77	5.5	p2
Proving Equivalen	UVA 12167							0				Sol	graph, scc	77	5.5	
	SRM608-D2-1000							0				Sol	graph, bf, floyd, cycles or max flow	77	5.75	
	SRM391-D2-1000							0					graph, scc, dp, [scc may help thoughts]	77	6	p3
	SRM495-D1-500							0					graph, scc, probability, [more about probabi	77	6.25	

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	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0				
	CF403-D1-C							0					graph, scc, matrix or optimized bf, [using th	77	6.25	p5
Summer sell-off	CF810-D2-B							0				Video Solution - Solver to be (Java)	greedy	84	2	p2
Minimum Ternary	CF1009-D12-B							0					greedy	84	2	
Towers	CF479-D2-B							0					greedy	84	2	
Semifinals	CF378-D2-B							0					greedy	84	2	
The Child and Set	CF437-D2-B							0					greedy, sorting, bitmasks	84	2.5	
Sort the Array	CF451-D2-B							0				Video Solution - Solver to be (Java)	greedy, sorting	84	2.5	p2
Mahmoud and a T	CF766-D2-B							0				Video Solution - Solver to be (Java)	greedy	84	2.5	p3
Escape from Ston	CF265-D2-C							0					greedy, impl	84	3	
Fixing Typos	CF363-D2-C							0					greedy, impl	84	3	
Photographer	CF203-D2-C							0					greedy, sorting	84	3	
Booking System	CF416-D2-C							0					greedy, sorting or dp	84	3.5	p3
Treasure Hunt	CF979-D2-B							0					greedy, [cases]	84	3.5	p1
Assemble	UVA 12124							0				Sol	greedy, bf or binary search	84	4	
	CODECHEF KSUM							0					greedy, sets, finding max k subarrays	84	4	p3
	CF1064-D2-C							0					greedy, palindromes	84	4	p3
	CF534-D2-D							0					greedy, set or grid compress	84	4	p2
	CF1065-D2-C							0					greedy	84	4	p2
	CF445-D2-C							0					greedy	84	4	p2
Geometric Progre	CF567-D2-C							0					greedy	84	4	p2
	SRM481-D1-500							0					greedy, math	84	4	p2
Team	CF401-D2-C							0					greedy, constructive	84	4	
Drazil and Factori	CF515-D2-C							0				Video Solution - Dr Mostafa Saad	greedy, math	84	4	
Hiring Staff	CF216-D2-C							0					greedy	84	4	
Star sky	CF835-D2-C							0				Video Solution - Solver to be (Java)	greedy, prefix sum 2d	84	4	
Vanya and Exams	CF492-D2-C							0					greedy, sorting	84	4	
	ZOJ 1200							0					greedy, simulation, priority queue	84	4.5	p3
	CF729-D12-D							0					greedy, [pigeonhole principle]	84	4.5	p2
A and B and Intere	CF519-D2-D							0					greedy, datastructures or dp	84	4.5	p2
Palindrome Transf	CF486-D2-C							0					greedy, impl, [reverse thinking]	84	4.5	p2
Marina and Vasya	CF584-D2-C							0					greedy, constructive, [reverse thinking]	84	4.5	p1
Tennis Champions	CF735-D2-C							0					greedy, math, [reverse thinking]	84	4.5	p1
Anya and Ghosts	CF508-D2-C							0					greedy	84	4.5	
Terse princess	CF148-D2-C							0				Video Solution - Eng Mohamed Nasser	greedy, constructive	84	4.5	
Lucky Permutation	CF287-D2-C							0					greedy, constructive	84	4.5	
Balls and Boxes	CF260-D2-C							0				Video Solution - Dr Mostafa Saad	greedy, impl	84	4.5	
	CF313-D2-C							0					greedy, constructive	84	5	
Upgrading Array	CF402-D2-D							0					greedy or dp	84	5	
	SRM456-D2-1000							0					greedy, math, binary search	84	5	p3
End of Exams	CF94-D2-D							0					greedy, math, impl	84	5	p3
	CF1012-D1-A							0					greedy, brute force, sorting	84	5	p2
Queue	CF141-D2-C							0					greedy, constructive	84	5	p2
	SGU 321							0				Sol	greedy, dfs , tree	84	5	p2
Dispute	CF242-D2-D							0					greedy, dfs or bfs, greedy	84	5	p2
	SRM292-D1-500							0					greedy, graph	84	5	p2
	CF1038-D2-D							0					greedy, impl	84	5	p2
	UVA 12325							0				Prove your Solution	greedy, knapsack, math	84	5	p2
	SRM405-D2-1000							0					greedy, math, strings	84	5	p2
Boring Partition	CF239-D2-D							0				Sol, Find proof (See editorial comments)	greedy, sortings	84	5	p2
No to Palindromes	CF465-D2-C							0					greedy or bf	84	5	
	CF709-D2-D							0					greedy, math or pattern or segment tree	84	5.5	p3
	CODECHEF BJUDGE							0					greedy, constructive	84	5.5	p3
	CF1023-D12-E							0					greedy, interactive, constructive	84	5.5	p3
Russian Roulette	CF104-D2-D							0					greedy, math, adhoc	84	5.5	p3
	CF1043-D12-E							0					greedy, sort, prefix sum, [maybe solve smt	84	5.5	p3
DZY Loves Modifi	CF447-D2-D							0				Prove	greedy or dp or datastructures	84	5.5	p2
	AtCoder002-AGC-C							0					greedy, datastructures, stl	84	5.5	p2
Of Zorcs and Axes	CF101149-GYM-G							0				Sol	greedy or dijkstra, [multiple start nodes]	84	5.5	p1
Robin Hood	CF672-D2-D							0					greedy, binary search, [strict time]	84	5.5	
	SRM453.5-D2-1000							0					greedy, math, sorting or dp	84	6	p3
	CF867-D12-E							0					greedy, observations	84	6	p3
	SRM392-D1-1000							0					greedy, bf, mask, impl	84	6	p2
Tennis Game	CF496-D2-D							0					greedy, bf, impl	84	6	
Wasted Time	CF127-D2-A							0					impl	86	1.5	
Juicer	CF709-D2-A							0				Video Solution - Solver to be (Java)	impl	86	1.5	
Anton and Polyhe	CF785-D2-A							0				Video Solution - Solver to be (Java)	impl	86	1.5	
Valera and X	CF404-D2-A							0				Video Solution - Solver to be (Java)	impl, stl, set	86	1.5	
Tanya and Postca	CF518-D2-B							0					impl	86	2	
Mike and Fun	CF548-D2-B							0					impl	86	2	
Covered Path	CF534-D2-B							0					impl	86	2	
Print Check	CF631-D2-B							0					impl	86	2	
Lucky Mask	CF146-D2-B							0					impl	86	2	
Special Offer! Sup	CF219-D2-B							0					impl	86	2	p2
Non-square Equat	CF233-D2-B							0					impl	86	2	
Flag Day	CF357-D2-B							0					impl	86	2	
Sereja and Mirror	CF426-D2-B							0					impl	86	2	
Little Pony and So	CF454-D2-B							0					impl	86	2	
MUH and Importa	CF471-D2-B							0					impl	86	2	
Gena's Code	CF614-D2-B							0					impl	86	2	
Opposites Attract	CF131-D2-B							0					impl	86	2	
Little Pigs and Wo	CF116-D2-B							0					impl	86	2	
Cosmic Tables	CF222-D2-B							0					impl	86	2	
Prime Matrix	CF271-D2-B							0					impl	86	2	
Wet Shark and Bis	CF621-D2-B							0				Video Solution - Eng Mahmoud Mabrok	impl	86	2	
	CF1030-D12-B							0					impl, math	86	2	
Facetook Priority V	CF75-D2-B							0					impl, sorting	86	2	
Queue	CF490-D2-B							0					graph, constructive, adhoc	86	3	p2
Hanoi Tower	TIJUS 1054							0				Sol	impl, recursion, tower of hanoi	86	3	p2
Treasure	CF495-D2-C							0					impl	86	4	
Game	CF69-D2-C							0					impl	86	4	
Accordian Patien	UVA 127							0				Video Solution - Eng Moaz Rashad	impl	86	4	p1
Beautiful Sets of P	CF268-D2-C							0					impl, constructive	86	4	
Appleman and Tot	CF462-D2-C							0				Sol	impl, sorting, huffman coding	86	4	
Three Logos	CF581-D2-D							0					impl	86	4.5	p2
Guess Your Way C	CF507-D2-C							0				Video Solution - Dr Mostafa Saad	impl, math	86	4.5	p2
	CF1042-D12-D							0					impl or segment tree or bit	86	5	p2

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	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0				
Mafia	CF349-D2-C							0					impl, math	86	5	p2
Unusual Product	CF405-D2-C							0					impl, math, [symbolic thinking]	86	5	p1
	CF101187-GYM-E							0				Sol	impl	86	5.25	p2
Special Grid	CF435-D2-D							0					impl, greedy	86	5.5	p2
Theatre Square	CF1-D12-A							0				Video Solution - Solver to be (Java)	math	87	1.5	
	CF1204-D2-A							0				Video Solution - Dr Mostafa Saad	math, log, binary, pattern observation	87	2	p2
Balanced Rating	CF1237-D12-A							0					math, analysis	87	2	p3
The Drunk Jailer	LIVEARCHIVE 2557							0				Find a formula	math or bf	87	2	p1
Product	UVA 10106							0				Video Solution - Eng Youssef El Ghareeb, Don't	math	87	2	
To Carry or not to	UVA 10469							0				Sol	math	87	2	
Adding Reversed I	UVA 713							0				Don't use big integer class. Write simple array cc	math	87	2	
Dreamoon and Wi	CF476-D2-B							0				Video Solution - Eng Mohamed Adel	math, combinatorics, bitmasks	87	2	p3
	CF1051-D2-B							0					math	87	2.5	
Escape	CF148-D2-B							0					math	87	2.5	
Restoring Painting	CF675-D2-B							0					math	87	2.5	
Caisa and Pylons	CF463-D2-B							0				Video Solution - Eng Muntaser Abukadeja	math, impl	87	2.5	
T-primes	CF230-D2-B							0					math, numberr theory	87	2.5	
	CODECHEF GCDMOD							0				Sol uses __int128 to avoid overflow	math, __int128	87	3	p3
Polycarpus' Dice	CF534-D2-C							0				Sol	math, greedy, careful impl	87	3	p3
	CF1059-D2-C							0					math, constructive	87	4	p3
Number Sequence	UVA 10706							0					math	87	4	p2
Divisible by Seven	CF376-D2-C							0					math, number theory	87	4	p2
Fractions Again?!	UVA 10976							0				Sol to read	math, number theory	87	4	p1
Plant	CF186-D2-C							0					math	87	4	
Magic Formulas	CF424-D2-C							0					math	87	4	
Duff in Love	CF588-D2-B							0					math	87	4	
Light, more light	UVA 10110							0				Video Solution - Eng Amr Saud	math	87	4	
Power of Cryptogr	UVA 113							0				Sol to read	math, log, [double limits]	87	4	p3
Round Table Knig	CF71-D2-C							0					math or dp	87	4	
Lucky Permutation	CF304-D2-C							0					math, constructive	87	4	
Vasya and Petya's	CF577-D2-C							0					math, impl	87	4	p2
	CF1239-D1-A							0					math, pattern	87	4.25	p3
The ? 1 ? 2 ? ... ?	UVA 10026							0					math or binary search	87	4.5	p2
Secrets	CF334-D2-C							0					math	87	4.5	
The Meaningless	CF834-D2-C							0				Video Solution - Solver to be (Java)	math	87	4.5	
Find Maximum	CF353-D2-C							0					math, bits	87	4.5	
Plus and Square R	CF716-D2-C							0					math, constructive	87	4.5	
Bear and Prime 10	CF680-D2-C							0					math, constructive, interactive	87	4.5	
	CF1040-D2-D							0					math, randomization, binary search, interac	87	5	p4
Count Good Subst	CF451-D2-D							0					math, adhoc, palindromes, [short code]	87	5	p3
Tavas and Karafs	CF535-D2-C							0					math, binary search	87	5	p2
As Fast As Possib	CF701-D2-D							0					math, binary search, precision	87	5	p2
	CF955-D2-C							0					math, number theory	87	5	p2
	CF45-D12-D							0					math, randomization	87	5	p2
Ciel and Robot	CF322-D2-C							0					math, impl, [cases]	87	5	p1
Crazy Town	CF499-D2-C							0				Video Solution - Dr Mostafa Saad	math, number theory, greedy	87	5	p1
About Bacteria	CF199-D2-C							0					math	87	5	
DNA Alignment	CF520-D2-C							0					math	87	5	
Predict Outcome o	CF451-D2-C							0					math, equations, impl	87	5	p2
Analyzing Polyline	CF195-D2-D							0					math, sortings	87	5	
	CF1016-D12-D							0					math, xor, bitwise, constructive	87	5.25	p3
Quantity of Strings	CF151-D2-D							0					math, repeated squaring, graph	87	5.5	p4
How many trees?	CF9-D2-D							0					math or dp_tree	87	5.5	p2
The Errant Physici	UVA 126							0				Sol	math	87	5.5	
Software CRC	UVA 128							0				Video Solution - Eng Moaz Rashad	math	87	5.5	
Jeff and Furik	CF352-D2-D							0				Sol	math or dp_expectation	87	6	p3
Magical Array	CF84-D2-B							0					math, combinatorics	89	2.5	
Chocolate	CF617-D2-B							0				Video Solution - Eng Yahia Ashraf	math, combinatorics	89	2.5	
Colorful Field	CF79-D12-B							0				Video Solution - Solver to be (Java)	math, mod	89	2.5	p3
The World is a The	CF131-D2-C							0				Video Solution - Eng Youssef Ali	math, combinatorics	89	4	
Pocket Book	CF152-D2-C							0					math, combinatorics	89	4	
Black and white pi	UVA 11231							0				Video Solution - Eng Amr Saud	math, combinatorics, counting	89	4	
	CF758-D2-C							0					math, combinatorics	89	5	p3
	CF459-D2-C							0					math, combinatorics, constructive	89	5	p3
	HACKER ajourney							0					math, combinatorics, first/last k digits 2^n, f	89	5	p3
Shaass and Lights	CF294-D2-C							0				Video Solution - Dr Mostafa Saad	math, combinatorics	89	5.5	p4
	CF869-D2-C							0					math, combinatorics or dp_counting	89	5.5	p3
Tourist Problem	CF340-D2-C							0					math, combinatorics, impl	89	5.5	p1
Fox Dividing Chee	CF371-D2-B							0				Video Solution - Eng Abanob Ashraf	math, factorial	94	2.5	
Permalex	UVA 153							0				Sol	math, factorial, permutations, duplicates, fa	94	4.5	p3
Prime Factors	UVA 583							0					math, factorization	95	2	
Easy Number Cha	CF236-D2-B							0				Video Solution - Eng Yahia Ashraf	math, factorization	95	3	
Mr. Azad and his	UVA 10490							0				Sol to read	math, factorization	95	3	
Prime Land	UVA 516							0					math, factorization	95	3	
Perfect P-th Powe	UVA 10622							0				Video Solution - Eng Moaz Rashad	math, factorization	95	4	p1
Factovisors	UVA 10139							0				Sol to read	math, factorization, primes, [factorize x!]	95	4	
	CF1047-D2-C							0					math, factorization	95	4.5	p3
DDF	UVA 547							0					math, factorization, divisors sum, multiview	95	4.5	
	UVA 10174							0					math, factorization, case analysis	95	5	
Multifactorials	UVA 11347							0					math, factorization, divisors sum	95	5	
	CF1033-D12-D							0					math, factorization	95	5.5	p3
Remainders Game	CF688-D2-D							0					math, factorization, gcd, lcm, observations	95	6	p4
Primitive Root	SPOJ PROOT							0				Sol	math, factorization, primitive roots	95	6.25	p4
	UVA 12869							0				Sol	math, formula	98	5	p2
Combinations	UVA 369							0					math, gcd, comb formula	99	2	
Pi	UVA 412							0				Video Solution - Eng Mohamed Adel	math, gcd	99	3	
Trains	CF88-D2-C							0				Video Solution - Solver to be (Java)	math, gcd or adhoc	99	4	
Mint	UVA 10717							0				Sol	math, gcd, lcm	99	4	
The Big Race	CF592-D2-C							0					math, gcd, lcm, [overflow]	99	4.5	p3
LCM Cardinality	UVA 10892							0					math, gcd, lcm	99	4.5	
Rational Resistanc	CF344-D2-C							0					math, gcd	99	5	p3
LCM Challenge	CF236-D2-C							0					math, gcd, lcm	99	5	
	CF1010-D1-C							0					math, gcd, mod, number theory	99	5.5	p1
	AICoder026-AGC-B							0				Sol	math, gcd, cases	99	6	p3
	SPOJ EASYMATH							0				Sol	math, inclusion-exclusion, lcm	101	3	
Hamburgers	CF371-D2-C							0					math, inclusion-exclusion, binary search	101	3	

UVA Hints

UVA Volume Lists

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ff	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments about your approach is interesting?	Mostafa Category	Category Code	Level	Quality
	AC Averages => UVA 10325	0	0	0	0	0	0	0	0	0	0	0				
The Lottery	CF411183-GYM-B							0			Sol		math, inclusion-exclusion, gcd, overflow	101	4	
	CF1972-D-8							0			Sol		math, inclusion-exclusion	101	4	
	SPOJ MSKYCODE							0			Sol		math, inclusion-exclusion	101	5.75	p2
	CF101992-GYM-D							0			Sol		math, inclusion-exclusion	101	6	p3
Equation	UVA 727							0					math, infix to postfix	102	4	
Farm	TUMUS 1349							0			Know Fermat's Last Theorem (ignore proof)		math, math_adhoc, fermat last theorem	104	2	p2
Summation of Poly	UVA 11312							0					math, math_adhoc, polynomials	104	2	
	HACKR tower-3-colorin							0			Learn Fermat's little theorem		math, math_adhoc, fermat little theorem	104	3	p1
R U Kidding Mr. F	UVA 10509							0					math, math_adhoc, patterns	104	3.5	
Polly the Polynomi	UVA 498							0					math, math_adhoc, polynomials	104	3.5	
Jzzhu and Sequen	CF450-D2-B							0					math, matrix, matrix exponent	105	2.5	
Mirror, Mirror	UVA 483							0					math, matrix, rotate, reflect, impl	105	3	p1
Clear Symmetry	CF172-D-2-C							0					math, matrix, bf	105	4	
End of Fun	SPOJ DCEPC12E							0					math, matrix	105	4.5	
Uniform Generator	UVA 408							0			Video Solution - Eng Yahia Ashraf		math, mod	109	3	
Be Efficient	UVA 11155							0					math, mod	109	5	
Quiz	CF387-D2-C							0					math, mod, pow, greedy	109	5.5	p3
Cows and Cars	UVA 12932							0					math, probability, formula	113	2	
What is the Probat	UVA 10056							0			Revise Probability		math, probability, formula, fraction style	113	2	
	HACKR sherlock-and-p							0			Sol		math, probability	113	3	
Probability Given	UVA 11181							0			Sol		math, probability, fractions style	113	3	
Another Lottery	UVA 11318							0			Sol		math, probability, conditional probability	113	4	p2
Mushroom Scientist	CF10186-D2-D							0			Sol		math, probability, fraction style, gcd	113	4	
	CF101864-GYM-A							0			Sol		math, probability or log, ternary search	113	5	p4
	SRM537-D2-1000							0					math, probability, combinatorics, math	113	5	p2
Airplane	UVA 12461							0			Sol		math, probability, graph, cycle	113	5	p2
Probability	UVA 11346							0			Sol		math, probability, greedy	113	5	p1
	SRM215-D4-1000							0					math, probability, integration	113	5.25	p3
	CF26-D12-D							0			Sol - must read		math, probability, bf or dp	113	5.5	
	CF442-D1-B							0					math, probability, factorial, logarithm, combi	113	5.5	p3
	SRM352-D2-1000							0					math, probability, sorting	113	5.5	p3
	CF513-D12-C							0			Sol		math, probability, recursion, precision	113	5.5	
	UVA 697							0			Sol		math, probability, bitmasks or dp_probabil	113	6	p3
	SPOJ RUNPROB							0			Sol		math, probability, combinatorics	113	6	
	CF163-D12-C							0					math, probability, formula	113	6	
	CF110-D2-D							0					math, probability	113	6.25	
God, Save me	UVA 10777							0			Sol		math, probability, combinatorics	113	6.25	
	SRM458-D2-500							0					math, probability, expectation or dp_probab	114	4	
	CF833-D1-C							0					math, probability, expectation, bitmasks	114	4	
	HACKR lazy-sieving							0			Revise Expected Value		math, probability, expectation, dfs	114	4	
Andrey and Probab	CF443-D2-D							0			Sol		math, probability, expectation, permutation	114	4	
Wet Shark and Flo	CF621-D2-C							0					math, probability, expectation, greedy or dp	114	4.5	p3
Little Pony and Ex	CF454-D2-C							0					math, probability, expectation	114	4.5	
	HACKR perfect-est							0					math, probability, expectation, pattern	114	4.5	
	SRM517-D1-250							0					math, probability, expectation, linearity of ex	114	5	p3
	SRM470-D1-500							0					math, probability, expectation, linearity of ex	114	5	p3
	CF500-D12-D							0					math, probability, expectation	114	5.5	p2
	CF280-D1-C							0					math, probability, expectation, dfs	114	5.5	p2
	CF268-D2-E							0			Sol		math, probability, expectation, dfs or dp	114	6	p3
Playlist	UVA 372							0					math, probability, expectation, formula, gre	114	6	p3
Big Mod	UVA 10394							0					math, repeated squaring, mod, direct	115	3	
Twin Primes	UVA 10394							0					math, sieve	117	3	
Factorial Factors	UVA 884							0					math, sieve, factorization	117	3.5	
Psycho	SPOJ PSYCHON							0					math, sieve, factorization, tricky big # test c	117	4	p2
Summation of Fou	UVA 10168							0			Video Solution - Eng Moaz Rashad		math, sieve	117	4	
Primes on Path	CF593-D2-C							0					math, sieve, palindromes	117	4.5	p3
Impossibility of Fact	UVA 10486							0			Sol to read		math, sieve	117	4.5	p2
	LIVEARCHIVE 4008							0					math, sieve, [last non zero digit of permutat	117	5.5	p2
The New Rule in E	UVA 10742							0			Sol		math, sieve, [last non zero digit of permutat	117	5.5	p2
Sum-up the Prime	UVA 10419							0			Sol		math, sieve, binary search	117	5.5	
Flying Saucer Seg	CF227-D2-C							0					math, sieve, dfs, dp	117	5.5	
Prasmon and Su	CF476-D2-C							0			Video Solution - Dr Mostafa Saad		math, summations	118	4.5	p3
	CF214-D1-B							0					math, summations, [in my videos]	118	5	p3
Spongebob and Si	CF589-D2-D							0					math, summations, separate summations o	118	5	p2
Largest Rectangle	SPOJ HISTOGRA							0			Sol - Don't implement as adhoc/greedy/Pure SI		math, summations, bf, [overflow]	118	6	p2
RZD2 and Droid A	CF514-D2-D							0			Use rmq		rmq, d&c or datastructure, [largest rectangl	122	4.5	p4
Friends and Subse	CF689-D2-C							0					rmq, binary search or bit or two pointers	122	5	p3
Pair of Numbers	CF359-D2-C							0			Sol		rmq, sparse table, binary search or datastru	122	5	p3
Square Subsets	CF448-D2-C							0					rmq, binary search, gcd, analysis or stack	122	5.5	p2
Potentiometers	LIVEARCHIVE 2191							0					search, d&c, greedy	123	4.5	
Interval Product	UVA 12532							0					segment tree, [interval sum query]	125	2	p3
Halt The War	SPOJ CDC12_H							0					segment tree or bit, [~=!ju 3440]	125	2	
Multiples of 3	SPOJ MUL103							0			Sol		segment tree	125	3.5	
Horrible Queries	SPOJ HORRIBLE							0					segment tree, lazy propagation	125	4	p3
Counting Primes	SPOJ CNTPRIME							0					segment tree, lazy propagation or bit	125	4	p1
Maximum Sum	SPOJ KGSS							0					segment tree, sieve	125	4	p1
A Famous City	SPOJ CITY2							0			Sol		segment tree, [max pair sum]	125	4.5	p3
Help R2-D2	SPOJ HELPR2D2							0					segment tree or adhoc	125	4.5	p2
Light Switching	SPOJ LITE							0					segment tree, impl	125	4.5	p2
Circular RMQ	CF520-D12-C							0					segment tree, lazy propagation, [edu]	125	4.5	p1
Brackets	SPOJ BRCKTS							0			Sol		segment tree, lazy propagation, circular	125	4.5	
Can you answer th	SPOJ GSS1							0			Sol		segment tree, [bracket balance, 2 values in	125	5	p3
RMQ with Shifts	UVA 12299							0			See sscanf and sprintf usage		segment tree, [max sum, part of gss series	125	5	p3
AND Rounds	SPOJ ANDROUND							0			Sol		segment tree, rmq shift	125	5	p3
Andy, Prates	UVA 11402							0			Sol		segment tree	125	5	p2
Present	CF460-D2-C							0			Sol		segment tree, lazy propagation or datastruc	125	5	p2
Fence Obstacle Cr	PKU 2374							0			Sol		segment tree, lazy propagation, greedy or t	125	5	p2
	CF61-D2-E							0					segment tree, dp or dp	125	5	p1
Can you answer th	SPOJ GSS3							0					segment tree or wavelet tree, [boring, inver	125	5	p1
Sum of Squares v	SPOJ SGGSS3							0			Sol		segment tree, [max sum+updates, spoj gss	125	5.5	p5
	CF380-D1-C							0					segment tree, lazy propagation, impl, [weak	125	5.5	p4
Can you answer th	SPOJ GSS4							0					segment tree, [~=!spoj gss5], [spoj gss1]	125	5.5	p3
SKYLINE	UVA 1232							0			Sol		segment tree or bit, [classical]	125	5.5	p2
Ordering the Soldi	SPOJ ORDERS							0			Sol		segment tree, [skyline overlap, tie]	125	5.5	
	SPOJ OPG1207							0			Sol		segment tree, kth element or bit or bst or tre	125	5.75	p3
								0					segment tree, lazy propagation, [handle dir	125	6	p3

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	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0				
	SPOJ BRCKTS2							0				Sol	segment tree, prefix sums or adhoc, recursi	125	6	p3
Bookworm	TIMUS 1638							0				Can you get AC first submission	simulation, formula, [was, tricky]	126	2	p2
Taxi	TIMUS 1607							0				Can you get AC first submission?	simulation, tricky	126	2	p1
The Blocks Problem	UVA 101							0					simulation	126	3	
Oulipo	PKU 3461							0					string processing, kmp, [count word frequer	130	2	
A Needle in the Ha	SPOJ NHAY							0					string processing, kmp, [find words position	130	3	
Finding the Tesser	SPOJ TESSER							0					string processing, kmp	130	4	p4
Period	SPOJ PERIOD							0					string processing, kmp, period max or suffix	130	4.5	p3
Prefixes and Suffix	CF432-D2-D							0					string processing, kmp or z-function	130	5	p3
Tavas and Maleka	CF535-D2-D							0					string processing, kmp or z-function, [~cf12	130	5	p3
	CF1147-D1-B							0					string processing, kmp	130	5.25	p2
Messenger	CF631-D2-D							0					string processing, kmp	130	5.5	p3
	CF1138-D2-D							0					string processing, kmp	130	5.5	p2
	FbHkCup 18-RQ-C							0					string processing, kmp	130	5.5	p1
	UVA 11475							0				Sol	string processing, kmp	130	5.5	
Phone List	SPOJ PHONELST							0					string processing, trie	135	3.5	
Cellphone Typing	UVA 12526							0					string processing, trie	135	4.5	p3
Disk Tree	UVA 1556							0					string processing, trie, trie using map, preth	135	4.5	p3
Search in the dicti	SPOJ DICT							0					string processing, trie	135	4.5	p2
Vasily's Multiset	CF706-D2-D							0					string processing, trie	135	5	p2
	LiveArchive 8015							0				Sol	string processing, trie	135	5.25	p4
	CF842-D2-D							0					string processing, trie, [xor]	135	5.5	p3
	CF665-D12-E							0					string processing, trie	135	5.5	p3
	LiveArchive 4682							0				Sol	string processing, trie	135	5.5	
	CF455-D1-B							0					string processing, trie	135	5.5	
Spider's Web	CF216-D2-D							0					two pointers or adhoc	138	3	
Points on Line	CF252-D2-C							0					two pointers or binary search, combinatoric	138	4	p2
Hometask	CF155-D2-C							0					two pointers or dp	138	4.5	
	CF1043-D12-D							0					two pointers, [different solutions]	138	5	p3
	CODECHEF REDCGAI							0					two pointers	138	5	p2
Sereja ans Anagra	CF368-D2-D							0				Sol	two pointers or adhoc or kmp-like	138	5	p2
Vasya and String	CF676-D2-C							0					two pointers	138	5	
To Add or Not to A	CF231-D2-C							0					two pointers, binary search	138	5	
Two Strings	CF224-D2-D							0				Sol	two pointers	138	5.5	p3
Chips	CF334-D2-D							0					two pointers or adhoc	138	5.5	p2
	CF309-D12-B							0					two pointers, dp or greedy	138	5.5	p2
Maximum Xor Sec	CF281-D2-D							0					two pointers or segment tree	138	5.5	
						Category Code to match with Col O		Learning Order		Video						
1- Column K (learning order) is same order as the sheets A-D 2- You may follow this order to learn								1		Watch - Approaching Problem Statement						
								2		Watch - Thinking - On papers Not on PC						
								3		Watch - Measuring Algorithms Performance - 1						
								4		Watch - Elementary Math - Introduction						
3- Column G is the category code as in Column O 4- Example: You learned DFS. Codes for it are 60, 61, 63. Go and solve as u want from the problems with these codes. E.g. UVA 10461						109		5		Watch - Number Theory - Modular Arithmetic						
						89, 101		6		Watch - Combinatorics - Counting Principles						
								7		Watch - Graph Theory - Intro						
						60,61,63		8		Watch - Graph Theory - DFS						
						45		9		Watch - Computational Geometry - Intro						
						45		10		Watch - Computational Geometry - Point and Vector						
						6		11		Watch - Search Techniques - Binary Search						
								12		Watch - Thinking - Problem Simplification						
								13		Watch - Thinking - Brainstorm - Rank - Approach						
								14		Study STL						
						89, 101		15		Watch - Combinatorics - Permutations and Combinations - 1						
						89, 101		16		Watch - Combinatorics - Permutations and Combinations - 2						
								17		Watch - Training-Secrets of Success						
								18		Watch - Training-Secrets of Success						
						99		19		Watch - Number Theory - Fib, GCD, LCM, Pow						
								20		Watch - Prefix Sum						
						57		21		Watch - Graph Theory - BFS						
								22		Review - Recursion						
						10		23		Watch - DP - Intro 1						
						10		24		Watch - DP - Intro 2						
						45		25		Watch - Computational Geometry - Complex Number and 2D Point						
						48		26		Watch - Computational Geometry - Lines and Distances						
								27		Watch - Focused and Diffused Thinking						
						65,76		28		Watch - Graph Theory - MST - Kruskal						
						84		29		Watch - Intro to Greedy						
								30		Watch - Thinking - Concretely - Symbolically - Pictorially						
								31		Watch - Thinking - Problem Constraints						
								32		Watch - Number Theory - Primes						
								33		Watch - Algebra - Number Bases and Polynomials						
								34		Watch - Algebra - Patterns in Sequences						
						118		35		Watch - Algebra - Summations						
								36		Watch - Algebra - Basic Matrix Operations						
								37		Watch - Thinking - Problem Abstraction						
								38		Watch - Thinking - Problem Reverse						
						3		39		Watch - Search Techniques - Backtracking						
								40		Review bitmasking						
						10		41		Watch - DP - Subset Style						
						32		42		Watch - DP - Consecutive Ranges Style						
						32		43		Watch - DP - Nested Ranges Style						
						32		44		Watch - DP - General Ranges Style						
								45		Watch - Thinking - Incrementally						
								46		Watch - Thinking - Problem Domain re-interpretation						
						95		47		Watch - Number Theory - Factorization						
						113		48		Watch - Probability - First 9 videos						
								49		Watch - Thinking - Search Space and Output Analysis						
								50		Watch - Thinking - Observations Discovery						
						41		51		Watch - Game Theory - Intro						
								52		Watch - Thinking - Misc - Solution Verification - Implementation						
						64		53		Watch - Graph Theory - Dijkstra						
						48		54		Watch - Computational Geometry - Lines Intersections						
						47		55		Watch - Computational Geometry - Circles						
								56		Watch - Thinking - Error Inspection - History - Contest Strategy						
						15		57		Watch - DP - Building Output						

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	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0				
						18				58		Watch - DP - Counting				
										59		Watch - Thinking - Let's Put All Together				
						37				60		Watch - DP - Table Method				
						68				61		Watch - Graph Theory - Floyd Warshal				
										62		Watch - Measuring Algorithms Perfomance - 2				
						62				63		Watch - Graph Theory - Tree Diameter and Isomorphism				
						114				64		Watch Video - Expected Value				
						122, 125				65		Watch - Data Structures - Segment Tree (2 vid)				
						38				66		Reading: DP on Trees				
						138				67		Watch - Two pointers technique				
						29				68		Watch - DP - Probability				
						11				69		Watch - DP - Masks (2 vid)				
						135				70		Watch - String Processing - Trie				
						36				71		Watch - DP - Sub-rectangle style				
						130				72		Watch - String Processing - KMP (2 vid)				
						23				73		Watch - DP - Games (2 vid)				
						49				74		Watch - Computational Geometry - Simple and Convex Polygons				
						49				75		Watch - Computational Geometry - Polygon Area - Centroid - Cut				
						49				76		Watch - Computational Geometry - Point in polygon				
						71,72,74				77		Watch - Graph Theory - Maximum Flow (2 vid)				
						77				78		Watch - Graph Theory - SCC (2 vid)				

[illegible]

Problem Name	Problem Code	Status	Submit Count	Reading Time(m)	Thinking Time(m)	Coding Time(m)	Debug Time(m)	Total Time(m)	Problem Level /10	By yourself?	Category	1-2 line Comments about your approach is interesting?	Mostafa Category	Category Code	Level	Quality
AC Averages =>		0	0	0	0	0	0	0	0	0	0	0				
UVA 11168												Sol	geometry, polygon, convex hull, distances	42	5	
UVA 361													geometry, polygon, convex hull, pip	42	5	
UVA 10652													geometry, polygon, convex hull, rotate, poly	42	6	
UVA 10750												Sol	geometry, sweep line, closest pair, [~=URI	44	3.5	
SPOJ NKMARS												Sol must read - video code has bug	geometry, sweep line, [rectangles area, in v	44	4	p3
SPOJ CECPC08B												Sol	geometry, sweep line, polyline or greedy, [T	44	4.5	p2
PKU 1177												Sol	geometry, sweep line or segment tree, [rect	44	5	p3
CF101147-GYM-I												Sol	geometry, sweep line, circles	44	5.5	p3
CF100622-GYM-C												Sol	geometry, sweep line, [https://github.com/Yi	44	5.5	p2
SPOJ NICODEY													geometry, sweep line or segment tree, sorti	44	6	p3
SPOJ SHORTCUT												Sol	geometry, sweep line, impl or bf	44	6	p3
SPOJ WILD												Sol	geometry, sweep line, sets	44	6.25	
HACKR spheres												Sol	geometry, 3d, ternary search	45	3.5	
UVA 10297												Sol	geometry, 3d, cones, volumes, formula	45	4	
UVA 11817													geometry, 3d, great circle distance	45	4	
LIVEARCHIVE 2233													geometry, 3d, sphere, floyd	45	4.5	
CF203-D2-D													geometry, 3d, impl, math, [physics, kinemat	45	5	p3
CF65-D12-C													geometry, 3d, lines, distances, binary searc	45	5	p1
SPOJ BLCONE													geometry, 3d, binary search	45	5	
UVA 11232												Sol	geometry, 3d, [differentiation needed for prc	45	5.5	
ZOJ 2369												Sol	geometry, 3d, integration, simpson, [cylind	45	6	
LIVEARCHIVE 2474													geometry, 3d, sphere, bf, next_permutation	45	6	
UVA 10449													graph, bellmanford	47	3	
UVA 10557													graph, bellmanford	47	3.5	
UVA 558													graph, bellmanford	47	4	
CF101498-GYM-L												Sol	graph, bellmanford, [~CODECHEF BESTPJ	47	6	p4
UVA 11090												Sol	graph, bellmanford, Minimum Mean Weight	47	6.25	p4
TIMUS 1137													graph, euler tour	54	3.5	
UVA 117													graph, euler tour, dijkstra	54	3.5	
UVA 10596													graph, euler tour, is there euler cycle?	54	3.5	
SRM268-D1-500												Prove your solution	graph, euler tour, handshaking lemma, cc	54	5	p1
UVA 10054													graph, euler tour	54	5	
CF788-D1-B													graph, euler tour, combinatorics	54	5.25	p3
SRM298-D1-500													graph, euler tour, [solve first SRM268-D1-5	54	6	p3
CF789-D2-D													graph, euler tour, math, [required a solid un	54	6.1	p4
CF1038-D2-E													graph, euler tour	54	6.1	p3
SPOJ SCITIES													graph, min-cost-max-flow, weighted biparti	59	4.5	
UVA 10594													graph, min-cost-max-flow	59	5	
TJU 2554													graph, min-cost-max-flow	59	6	p4
TC(ANGELDEMONG/													graph, min-cost-max-flow	59	6	
LIVEARCHIVE 2884													graph, scc, 2-sat or greedy	62	3	
SPOJ BUGLIFE												Sol	graph, scc, 2-sat, [simple dfs, Bipartite grap	62	4	
LIVEARCHIVE 4185												Sol	graph, scc, 2-sat	62	5	
CF228-D2-E													graph, scc, 2-sat, dsu, topological sort or ge	62	5	
CF776-D2-D													graph, scc, 2-sat	62	5.5	
CF469-D2-D													graph, scc, 2-sat or dsu or greedy	62	6	p4
CODECHEF ADAMTR													graph, scc, 2-sat	62	6	p3
LIVEARCHIVE 5010												Sol	graph, scc, 2-sat	62	6	
PKU 2723												Sol	graph, scc, 2-sat	62	6	
UVA 1146												Sol	graph, scc, 2-sat	62	6	
SRM464-D1-500													graph, scc, 2-sat	62	6.25	
UVA 10199													graph, scc, articulation point	63	3	p3
SPOJ SUBMERGE													graph, scc, articulation point	63	3	
UVA 315													graph, scc, articulation point	63	3	
UVA 10765													graph, scc, articulation point or dsu, bf	63	4	
UVA 796													graph, scc, biconnected components	64	4	
UVA 610												Sol	graph, scc, biconnected components, [~=CF	64	5.5	p3
SPOJ QTREE2												Sol	graph, lca, [in video, ~=PKU 1986, LIVEAR	65	4	
CF192-D2-E												Sol	graph, lca, [or with dp, binary lifting]	65	5	p3
SPOJ DISQUERY												Sol	graph, lca, dp, binary lifting, [educational], [l	65	5	p3
CF832-D2-D													graph, lca, math	65	5	p2
CF519-D2-E													graph, lca, lca on tree, rmq, impl	65	5.5	p3
TIMUS 1752												Sol	graph, lca, tree diameter, [~=KATTIS touris	65	5.75	p3
CF466-D2-E													graph, lca or dsu, offline queries	65	6.25	p3
CF587-D1-C													graph, lca, dp, binary lifting, impl or segmen	65	6.25	p3
CF863-D12-E													grid compress, prefix sum or segment tree	67	6	
UVA 870												Find grid-compress based idea	grid compress, rectangles, dfs, counting or	67	6	
CF243-D1-C													grid compress, dfs or bfs	67	6.5	
UVA 308												Sol	grid compress, flood-fill	67	6.5	
UVA 306													math, cyclic permutation	84	3	
SRM572-D1-250													math, cyclic permutation or dfs	84	3	
CF986-D1-B													math, cyclic permutation	84	5	p2
SRM391-D1-500													math, cyclic permutation, stirling number of	84	5	p2
SRM379-D2-1000													math, cyclic permutation or backtrack, dsu	84	5	
FbHkrCup 18-R1-B													math, cyclic permutation, dfs, trees	84	5.5	p2
SPOJ LEONARDO												Sol	math, cyclic permutation, graph cycles, eve	84	5.75	p4
SRM280-D2-1000												See Editorial	math, cyclic permutation or backtrack, pruni	84	5.75	p3
SPOJ SEQ													math, matrix, matrix pow	89	3	
SPOJ FIBTWIST													math, matrix, matrix pow, [fib]	89	3	
TJU 2300													math, matrix, matrix pow	89	3.5	p3
UVA 10229												Sol	math, matrix, matrix pow, fib, or pattern [dir	89	4	p2
SPOJ SUMSUMS												Sol	math, matrix, matrix pow, [basic hint in vide	89	4.5	p1
CF222-D2-E													math, matrix, matrix pow or dp	89	4.5	
CF582-D1-B													math, matrix, matrix pow, matrix pow max, (89	5	p5
CF621-D2-E												Sol	math, matrix, matrix pow or dp, d&c	89	5.5	p3
SPOJ PLHOP												Sol	math, matrix, matrix pow, graph, matrix pow	89	6	p4
UVA 11605												Sol	math, matrix, matrix pow, linearity of expect	89	6	p3
LIVEARCHIVE 4332												Sol	math, matrix, matrix pow, recurrence, gene	89	6	p3
CF821-D2-E													math, matrix, matrix pow, impl	89	6	p2
SPOJ XMAX												Sol	math, matrix, gaussian elimination, gauss-x	90	5.5	p5
CF1159-D12-E													math, matrix, gaussian elimination	90	5.5	p2
CODECHEF TREASU													math, matrix, gaussian elimination, bitset	90	6	p3
TIMUS 1042												Editorial (Google Sol)	math, matrix, gaussian elimination	90	6	
UVA 684												Sol	math, matrix, gaussian elimination	90	6	
LIVEARCHIVE 4305												Sol(no editorial)	math, matrix, gaussian elimination, determi	90	6	
UVA 10104													math, extended gcd	94	3	

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AC Averages =>		0	0	0	0	0	0	0	0	0	0	0				
UVA 10673													math, extended gcd or gcd, simple math	94	3	
CF100812-GYM-L												Sol	math, extended gcd, totient	94	5	p1
UVA 10090												Sol	math, extended gcd	94	5	
HACKR solve-equation												Test cases are wrong. Case 1.4.1.82: judge out	math, extended gcd, geometry	94	5.5	
SRM385-D2-1000													math, diophantine	95	4.5	
LightOJ 1306												Sol	math, diophantine, extended gcd	95	5.5	p2
CF100506-GYM-C												Sol	math, diophantine, extended gcd or number	95	6	
UVA 11768												Sol	math, diophantine, extended gcd, lattice poi	95	6.25	
LIVEARCHIVE 5990												Sol	math, mod inv	96	4	
HACKR game-of-thron													math, mod inv, factorial inv or permutation	96	4	
CF327-D2-C													math, mod inv	96	5	
HACKR choose-and-c													math, mod inv, combinatorics, binomial coe	96	5	
SRM467-D1-500												Sol	math, mod inv, fermat's little theorem	96	5	
LIVEARCHIVE 4506													math, mod inv, dp, combinations	96	5.5	
SRM735-D1-500												Sol	math, mod inv, [easier version Timus 1132]	96	6	p3
CF146-D2-E													math, mod inv, factorial, dp_counting	96	6	p3
SPOJ DIVEQL												Sol	math, mod inv, gcd	96	6	p3
SPOJ KOPC12B												Sol - See CF post	math, mod inv, combinations, pattern	96	6	p2
CF816-D2-D													math, mod inv, combinatorics	96	6	p1
CF689-D2-E													math, mod inv, combinatorics, impl	96	6	
CF785-D2-D												Read this solution after trying	math, mod inv, summations, combinatorics	96	6.25	p5
CF521-D1-C												SolToMe	math, mod inv, factorials, combinatorics, [in	96	6.25	p4
UVA 11327													math, totient	97	3	
SPOJ DCEPCA03													math, totient	97	4.5	
CF101778-GYM-C												Sol	math, totient	97	5	p2
CF1009-D2-D													math, totient, [cases]	97	5	
UVA 11424												Sol	math, totient, sieve, sums, gcd	97	5	
UVA 10820													math, totient	97	5.5	
UVA 11426													math, totient	97	6	p3
UVA 10990													math, totient	97	6	
CF114-D2-F													math, totient	97	6.25	p2
CF100957-GYM-F													math, totient	97	6.25	
TIMUS 1456													math, totient, sieve	97	6.25	
LIVEARCHIVE 2116													math, mobius	98	4	
CF900-D2-D												Sol	math, mobius, inclusion-exclusion or dp_co	98	6	p3
SPOJ SQFREE												Sol	math, mobius, inclusion-exclusion	98	6.25	p4
CF803-D12-F													math, mobius, inclusion-exclusion	98	6.25	p3
SPOJ SUB_PROB												Sol	string processing, aho_corasick or suffix arr	103	4	
SRM519-D1-500													string processing, aho_corasick	103	5	
SRM557-D2-1000													string processing, aho_corasick, dp or kmp,	103	5	
LIVEARCHIVE 5064												Sol	string processing, aho_corasick	103	6	
TIMUS 1269													string processing, aho_corasick	103	6	
CODECHEF LYRC													string processing, aho_corasick, dp	103	6	
UVA 12244												Sol	string processing, aho_corasick or suffix arr	103	6.25	p2
SPOJ SUBST1													string processing, suffix array, lcp, distinct s	104	3	p3
SPOJ MINMOVE												Sol	string processing, suffix array, lcp, smallest	104	4	p1
SPOJ SUBLEX												Sol	string processing, suffix array	104	4	
UVA 11107													string processing, suffix array, lcp, binary se	104	5	p5
SPOJ LPS												Sol	string processing, suffix array, lcp or rolling	104	5	p3
SPOJ LONGCS												Sol	string processing, suffix array, lcp, LCS k su	104	5	p2
CF113-D1-B													string processing, suffix array	104	5.5	
CF123-D1-D													string processing, suffix array or suffix auto	104	5.5	
LIVEARCHIVE 4477													string processing, suffix array, [solve first U	104	5.5	
CF149-D2-E													string processing, suffix array or kmp or su	104	6	p4
CF129-D2-D													string processing, suffix array, Kth lexograp	104	6	p4
SPOJ PLD													string processing, rolling hash, longest palin	105	4	p1
SPOJ ELCS													string processing, rolling hash	105	4	
CF1003-D3-F													string processing, rolling hash	105	5	p2
CF533-D1-E													string processing, rolling hash	105	5.5	p3
CF101741-gym-K													string processing, rolling hash	105	6	p3
CF101808-gym-B													string processing, rolling hash	105	6	p3
HACKER krtti-and-har													string processing, rolling hash, mo's algori	105	6	p3
CF245-D12-H													string processing, rolling hash, dp	105	6	p2
CF1056-D12-E													string processing, rolling hash, math	105	6	p2
CF101864-GYM-J												Sol	string processing, rolling hash, two pointer	105	6	p2
CF727-D2-E													string processing, rolling hash	105	6	
CF985-D12-F												Sol	string processing, rolling hash	105	6.25	p4
CF101627-GYM-D												Sol	string processing, rolling hash, greedy, bina	105	6.25	p3
SPOJ TWIST													bbst, treap	106	5	p2
SPOJ ADAAPHID												Sol	bbst, treap or segment tree	106	5	p2
SPOJ HEAPULM													bbst, treap or cartesian tree or order-statisti	106	5	
CF101864-GYM-K												Sol	bbst, treap	106	6	p3
SPOJ CERC07S												Sol	bbst, treap, segment tree, lazy or splay tree	106	6	p3
kattis hanot18_lazylear												Sol	bbst, treaps, impl, offline query answering o	106	6	p3
SPOJ GSS6												Sol	bbst, treap or splay tree or avl tree, [solve C	106	6	p2
UVA 12003												Discu	bbst, treap, impl	106	6	
CF38-D12-G													bbst, treap, binary search	106	6.25	p3
SPOJ MEANARR												Sol	bbst, treap or bit	106	6.25	p2
SPOJ DQUERY													mo's algorithm or segment tree persistence	107	4	
CODECHEF JTI15													mo's algorithm, bit, [count inversion]	107	5	p1
CF220-D1-B													mo's algorithm	107	5	
HACKER substrings-c													mo's algorithm	107	5	
SPOJ RACETIME												Sol	mo's algorithm or segment tree or sqrt deco	107	5	
SPOJ ZQUERY												Sol	mo's algorithm, [strict time/mem], [~=CODE	107	6.25	
Timus 1167													dp, dp_d&c_opt or dp	112	5	
CF321-D1-E													dp, dp_d&c_opt or dp_knuth, [standard prol	112	6	p2
SPOJ NKLEAVES												Sol	dp, dp_d&c_opt, [standard], [~=UVA 12524,]	112	6	
HACKER sprint5-minir												Sol	dp, dp_d&c_opt or dp_convex_hull or dp_ku	112	6.25	p4
CF834-D2-D												Sol	dp, dp_d&c_opt, segment tree, [Mido: When	112	6.25	p4
TIMUS 1553													graph, hid, lca	122	5	p2
SPOJ QTREE3												Sol	graph, hid or segment tree or bfs	122	5	
SPOJ QTREE													graph, hid, lca, segment tree or splay tree,]	122	5	
SPOJ GRASSPLA												Sol	graph, hid, segment tree	122	5	
PKU 2763												Sol	graph, hid or lca, bit	122	5.5	p2
SPOJ GOT												Sol	graph, hid or lca, segment tree, persistent o	122	6	p2
CF101856-GYM-E												Sol	graph, centroid-decomposition, primes	123	5	p2

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	AC Averages =>	0	0	0	0	0	0	0	0	0	0	0				
	CF321-D1-C												graph, centroid-decomposition, [tutorial prol	123	5.25	
	CF766-D2-E												graph, centroid-decomposition or dp_trees,	123	5.5	p3
	CF101174-GYM-F											Sol	graph, centroid-decomposition or dsu-on-tre	123	5.5	p3
	CF914-D12-E												graph, centroid-decomposition, bitmasks or	123	6	p3
	CF715-D1-C												graph, centroid-decomposition, dp, math or	123	6	
	LIVEARCHIVE 5133											Sol	dp, dp_convex_hull, [needs bbst (e.g. set) r	124	6	p4
	SPOJ ACQUIRE [1]											Sol	dp, dp_convex_hull, [type 1], [in editorial], [t	124	6	p3
	CF319-D1-C											Sol	dp, dp_convex_hull or LiChao, [straightflow	124	6	
	CF1083-D1-E											Sol (not intended)	dp, dp_convex_hull or segment tree, LiChai	124	6	
	CODECHEF CYCLRA											Sol	dp, dp_convex_hull, dynamic, [https://github	124	6.25	p3
	CF311-D1-B											Sol	dp, dp_convex_hull, [practice problem]	124	6.25	
	CF570-D2-D												graph, dsu-on-trees or graph, euler tour, bir	125	4	p1
	CF208-D2-E												graph, dsu-on-trees or trees, dfs, binary see	125	4	
	HACKER the-grass-ty												graph, dsu-on-trees	125	5	
	CF246-D2-E												graph, dsu-on-trees, [standard]	125	5	
	SGU 507											Sol	graph, dsu-on-trees, [standard], [Main a pr	125	5.5	p2
	CF1009-D12-F												graph, dsu-on-trees, [standard]	125	5.75	p2
	CF291-D2-E											Sol	graph, dsu-on-trees or kmp on tree	125	6.25	p3
	CF103-D1-D												sqrt decomposition	126	5	
	SPOJ FREQ2											Sol	sqrt decomposition or Mo's algorithm	126	5	
	CF797-D12-E												sqrt decomposition, dp	126	5.5	p2
	CF342-D2-E												sqrt decomposition, bfs or centroid-decomp	126	5.75	p3
	CF13-D12-E												sqrt decomposition	126	6	p3
	HACKR competitive-te											Sol	sqrt decomposition, dsu or segment tree [ht	126	6	p3
	CF551-D2-E												sqrt decomposition, binary search	126	6	
	CODECHEF DOCSDE											Sol	sqrt decomposition, datastructures	126	6.25	p3
	UVA 10304											Use knuth	dp, dp_knuth, [standard], [=UVA 12057]	128	5	p2
	UVA 12836											Use knuth	dp, dp_knuth, [standard]	128	5.25	
	SPOJ BRKSTRNG											Sol	dp, dp_knuth, [standard]	128	6	p3
	CODECHEF CHEFAC											Find O(NK) Sol	dp, dp_knuth, sparse table or dp_d&c	128	6.25	p3
	HACKER special-pairs												dp, dp_sos	134	5	p3
	CF383-D1-E												dp, dp_sos	134	6	p3
	CF165-D2-E												dp, dp_sos, math	134	6	p3
	HACKER uchiha-broth												dp, dp_sos, inclusion-exclusion	134	6.25	p4
	CF632-D12-E												math, fft, [practice]	138	6	
	SPOJ POLYMUL												math, fft, [practice]	138	6	
				In case you want some (subjective) order to study these topics:												
				This color means covered in my channel												
				geometry, sweep line												
				graph, lca												
				dp, dp_convex_hull												
				mo's Algorithm												
				sqrt decomposition												
				game theory, nim												
				game theory, Grundy												
				string processing, polynomial hashing												
				graph, min-cost-max-flow												
				ternary search												
				binary indexed tree												
				math, extended gcd												
				math, mod inv												
				graph, scc, articulation point												
				graph, scc, biconnected components												
				math, matrix, matrix pow												
				graph, euler tour												
				dp, dp_d&c_opt												
				dp, dp_expectation												
				graph, bellmanford												
				meet in middle												
				graph, heavy light decomposition												
				graph, dsu-on-trees												
				graph, centroid-decomposition												
				grid compress												
				math, matrix, gaussian elimination												
				dp, dp_knuth												
				dp, dp_state_reduce												
				dp, dp_sos												
				graph, scc, 2-sat												
				math, cyclic permutation												
				string processing, suffix array												
				balanced binary search tree												
				math, diophantine												
				math, totient												
				math, mobius												
				string processing, aho_corasick												
				geometry, polygon, convex hull												
				math, fft												
				dp, dp_cyclic												
				geometry, 3d												

	Weekly Check List
	Training Secrets of Success Video
Reading	
	Read within 3-5 minutes for short text problem. If no, you need to work on your Reading English Skills
	Never suspect later your problem understanding? If happens, you need to improve your comprehension / cases tracing
Thinking	
	Ready and in the challenging mood before start solving.
	Striving against the problem for a reasonable time. If no, you need to change your solving spirit. Be a fighter.
	Found a solution; Do verifications: text cases / extra cases / correctness / time & memory
Coding	
	Sketch in your mind the big picture of the code first. Don't rush for coding
	Code within 10 minutes. If more, you have coding skills problem or your understanding for the approach is not complete
	A lot of copy paste? Something wrong. Need a better code organization
	Needed more than 10 minutes to code medium size codes? Why? Identify the issue and solve it
Debugging	
	Which will be faster to catch the mistake? Printing or Debugger
	Don't know how to use a debugger? Learn this skill
	Needed more than 10 minutes to solve bugs? Something is wrong. Why need all this time? How to solve this issue?
Code is ready!	
	Just submit and see if passed? Wrong. Behave as if you are in the real contest. Are you almost sure it will be AC? If yes, submit
	TRAIN offline as if you are in a real contest. This shortens the gap between training and the real contest
Code Failed :(
	Are you nervous / frustrated? Yes => Wrong behavior. Take it easy
	Rush to test cases? Yes => Wrong, revise idea, then code, then trace more samples. Try for 15 minutes or more first
Got it AC	
	Read and Understood editorial solutions?
	Checked 1-3 other AC solutions?
	Tried to write a much shorter version of your code?
	Tried to write a faster coder (better complexity)?
Speed	
	How much time do you need in Div2-A/Div2-B? Target (5, 10) minutes for semiseniors, (3, 6) for seniors
	Not that fast? You need regular speed training on easy problems
Weakly contests	
	Do you participate in 1-2 contests per week at least? If no, this is bad. Offline training != Online contests
	You need to train yourself to behave in online contests similar to offline training. This is an important skill.
Sheet stats	
	Recorded them? Yes: read your problem's row. Where do you consume the most of the time? These are your weak skills
	No, I don't record! => How will you know your weak points?!
	Can't record timing as I am mixing thinking with coding? => Wrong behavior. get done with thinking, then move to coding. Don't cycle
Training Time	
	Is it regular and scheduled? Yes => you will have regular improvements.
	Your plan was to train X hours, Did so? If no, why?
	Without regular and continous training, your mind might not improve well
Training with?	
	Yourself only? You may feel bored. If can collaborate with others = longer commitment

Psychological issues	
	Do you keep comparing yourself with others?
	Do you have negative feelings? Like I am stupid..I am hopeless...I will never have a comparable level...?
	Do you think of your image/appearance if failed in online contests so avoid contests?
	Do you use another account with a weird name to train so that people don't know about your progress/failure?
	Do you wish your friends fail in the contest? or get annoyed with their better performance?
	Do you avoid teaching your friends something or give no support to remain better than them?
	Do you feel bored/frustrated as no/weak community in your college?
	Do you keep training day and night without breaks? No socialization at all?
	Do you hate specific topics and avoid them (probability/geometry)?
	'Should I stop' Dilemma? Keep thinking is it worth vs a waste of time?
	If any of the above questions is YES, you probably have a problem and need to find a solution to it.

[illegible]

[illegible]

[1] From a trainee: txt clarification: In this problem FJ can actually REARRANGE the plots and then groups them. * I misunderstood the statement by the word 'successive'