**Post-Problem Evaluation System (0–100 score)**

After solving each problem, assign a score out of 100 based on three components:

**1. How much of the solution you figured out yourself (max 50 pts)**

| **Situation** | **Score** |
| --- | --- |
| Solved completely on your own | 50 |
| Solved ~80% but made a small mistake | 40 |
| Got the main idea, but couldn’t implement | 30 |
| Needed a small hint from editorial | 20 |
| Didn’t solve, but understood after editorial | 10 |
| Still didn’t fully understand after editorial | 0 |

-10 points if I look at the tests where I was wrong

**2. Time taken to reach your best solution (max 40 pts)**

| **Time spent (including thinking + coding)** | **Score** |
| --- | --- |
| <15 minutes | 40 |
| 15–30 minutes | 30 |
| 30–50 minutes | 20 |
| >50 minutes | 10 |
| Couldn’t solve it | 0 |

**3. Time to understand editorial (max 10 pts)**

| **Editorial understanding time** | **Score** |
| --- | --- |
| Understood fully in <10 min | 10 |
| Understood in 10–20 min | 7 |
| Took more than 20 min to fully understand | 3 |
| Still unclear after reading | 0 |

Day 1: 13/04/2025 -> Unrated

I participated in <https://codeforces.com/contest/2094> (Div4) and solved 6/8 problems with place 571. I almost solved the 7th one so I will probably upsolve it tomorrow

Day 2: 14/04/2025 -> 596

Solved <https://codeforces.com/contest/1253/problem/D> (1700 difficulty). After 27 minutes I made a wrong submission with DSU (Time limit exceed on test 9) then a wrong intervals approach after 55 minutes and after 1 hour and 1 minute I finally found the intended solution with intersecting intervals.. Nothing new to learn but I was painfully slow..

Score: 50 + 10 + 10 -> 70 points

Solved <https://codeforces.com/problemset/problem/1228/C> (1700 difficulty). Solved it in 15 minutes, nice number theory problem, didn’t feel like I can learn something new from it

Score: 50 + 30 + 10 -> 90 points

Day 3: 16/04/2025 -> 596

I upsolved <https://codeforces.com/contest/2094/problem/G> from last DIV4 in 16 minutes just to realize that I was missing the reverse case where I just had to revert the “reversed” Boolean… It worked first try. I am frustrated I didn’t finish this in time in the contest. I spent 25 more minutes on another solution that uses only one deque instead of 2.

Score: 50 + 10 + 3 -> 63 points

I tried to solve <https://codeforces.com/problemset/problem/1209/D> (1700) for 50 minutes but no success. I think I got a few ideas but apparently I overcomplicated it.. I stayed 45 more minutes to understand the tutorial because it was poor written but I understood the DSU solution and DFS solution. Both are easy if you think in that direction.. my bad, I feel so stupid sometimes.

Score: 10 + 0 + 3 -> 13 points

I solved <https://codeforces.com/problemset/problem/1312/D> (1700) in about 40 minutes with a little help from editorial but once I got the main idea it was really easy. I made the mistake to think about taking with combinations after having the max element selected which is stupid..

Score: 20 + 0 + 10 -> 30 points

Day 4: 17/04/2025 -> 596

I solved <https://codeforces.com/contest/1625/problem/C> (1700) in 1 hour with O(n^3) solution using dp which was actually the intended solution. I thought I overcomplicated it. At first I did a O(n^2) solution but it was wrong on test 8 and I managed to understand why.

Score: 50 + 10 + 10 -> 70 points

I solved <https://codeforces.com/problemset/problem/1731/C> (1700) in 28 minutes with the intended solution. Reminder for myself that I always need to increase ap[0] to also count the whole prefix as xor or sum of prefixes, not just previous values.

Score: 50 + 30 + 10 -> 90 points

I solved <https://codeforces.com/contest/1829/problem/H> (1700) in 45 minutes. I complicated the solution with a dp with 6 dimensions, one for each bit instead of actually going through the numbers from 0 to 63.. fuck me… But.. I solved it alone and fully and after 1 minute on editorial I also implemented the easier solution so that’s great.

Score: 50 + 20 + 10 -> 80 points

Day 5: 18/04/2025 -> 596

I solved <https://codeforces.com/problemset/problem/1474/C> (1700) in 35 minutes. Pretty easy problem once I saw the bruteforce idea so that’s cool.

Score: 50 + 20 + 10 -> 80 points

I solved <https://codeforces.com/problemset/problem/1883/E> (1700) in 28 minutes. Really nice idea but nothing new to it.

Score: 50 + 30 + 10 -> 90 points

I tried to solve <https://codeforces.com/contest/1598/problem/D> (1700). I got some ideas right but totally missed the intended solution and I couldn’t do it. Cool trick to actually isolate the pairs. Tip for future: “Pay more attention to specific constraints, they probably are there for a reason”).

Score: 10 + 0 + 10 -> 20 points

Day 6: 19/04/2025 -> 596

I tried to solve <https://codeforces.com/problemset/problem/1537/D> (1700).. It was based on a really specific number theory link of thoughts and unfortunately I didn’t get it… Understood it after with editorial but damn..

Score: 10 + 0 + 10 -> 20 points

I solved <https://codeforces.com/problemset/problem/915/C> (1700) in 28 minutes, pretty easy greedy problem I would say.

Score: 50 + 30 + 10 -> 90 points

I solved <https://codeforces.com/problemset/problem/960/C> (1700) in 13 minutes. Nice problem with bits, kinda easy though.. I feel very good when I solve these so fast

Score: 50 + 40 + 10 -> 100 points

I solved <https://codeforces.com/problemset/problem/1176/E> (1700) in 20 minutes. Really nice graph problem. I really wonder if the problems I chose are actually really easy or I am getting better in just a few days (probably not), lol.

Score: 50 + 30 + 10 -> 90 points

I participated in <https://codeforces.com/contest/2096> (Div1 + Div2) and I took place 2911. A bad result in my opinion considering I spent 23 minutes on problem A which was actually easy……… I have 980 rating points now. Will upsolve D and E soon

Day 7: 20/04/2025 -> 980

I upsolved problem <https://codeforces.com/contest/2096/problem/D> . It was a nice problem with a nice click.. What I think I should do more from now and actually try to see parity relations between coordinates on problems with cartesian points. Also.. I shouldn’t really stay to much wondering with random ideas, this is what I discovered. More on practical thoughts. Problems at this level are not so adhoc as they seem.

I upsolved <https://codeforces.com/contest/2096/problem/E> . I approached it with a greedy but working in my opinion solution. Still, no success on it on test 2 at test case 840+ so fuck me.. Then I really got deep into editorial and it was beautiful to see the use of inversions here and parity and what each operation of the 4 possible does.. I really understood it in the end but damn, I am stupid

I gave a virtual contest of <https://codeforces.com/contest/1574> which was a contest where I did really bad in the past. I solved 2 problems, almost 3.. still a disaster (the problems are basically made not for me to solve them lol) but the 3rd problem was almost done.. I just missed a case. I then made a O(m \* log2(n)^2) solution and it passed but I also discovered a O(m \* log2(n)) solution which was nicer. Still I beat my past self from 2021 so that’s a win I guess.

Day 8: 21/04/2025 -> 1269

I participated in <https://codeforces.com/contest/2103> (Div2) and got place 1777 by solving A B C, not terrible but I could have been faster on B and of course, C. will upsolve tomorrow problems D and E

Day 9: 24/04/2025 -> 1538

I participated in <https://codeforces.com/contest/2106> (Div3) and got place 169 by solving A B C D E F. Really strong contest for me, will upsolve G1 and G2 soon

Day 10: 25/04/2025 -> 1538

Solved <https://codeforces.com/contest/1822/problem/F> (1700 Difficulty) in 35 minutes. Nice graph problems, I worked a little more on my nodes levels in a graph techniques.

Score: 50 + 20 + 10 -> 80 points

Solved <https://codeforces.com/problemset/problem/1114/C> (1700 Difficulty) in 22 minutes.

Score: 50 + 30 + 10 -> 90 points

Solved <https://codeforces.com/contest/833/problem/A> (1700 Difficulty) in 30 minutes but with a glance at the editorial.. I made a solution but got TLE on test 8. The complexity is good in my opinion, I don’t know why. But in the end I saw the easy observation I was missing :( . So sad

Score: 20 + 30 + 10 -> 60 points

Solved [https://codeforces.com/contest/1984/problem/C1 (1300](https://codeforces.com/contest/1984/problem/C1%20(1300) Difficulty) and [https://codeforces.com/contest/1984/problem/C2 (1700](https://codeforces.com/contest/1984/problem/C2%20(1700) Difficulty). I solved C1 with dp pretty fast but for C2 I couldn’t convert the dp. I then red the editorial and found out about the neat idea that operation 2 on a negative number should be made exactly once.. and this changed everything. Really nice solution but hard to see, idk.. at least for me. I also did a solution with map exactly to address the duplicates issue. Nice solution, I feel like I got the most out of this problem really.

Score: 20 + 10 + 10 -> 40 points (for C2), I had 90 for C1

Day 11: 26/04/2025 -> 1538

Upsolved <https://codeforces.com/contest/2103/problem/D> and I spent 2 hours trying first a graph approach but then with very little help from editorial (it was very vague so I would say it helped like 10%) I made a working soluion for the problem. What I got from this is that in construction problems I should thing about it on layers if possible. Nice problem. I spent a little more time to make a shorter solution and that’s it

Day 12: 27/04/2025 -> 1538

Gave a virtual contest on <https://codeforces.com/contest/1557> and got place 956 which is way better than the 6936 I got 4 years ago so that’s cool. I also upsolved problem D of 2200 difficulty and I made some changes to my segement tree template. Nice coordinates compression, I couldn’t solve it by myself…

Solved <https://codeforces.com/problemset/problem/1672/D> (1700) in around 25 minutes. Looked hard initially but actually nice problem.

Score: 50 + 30 + 10 -> 90 points

Day 13: 28/04/2025 -> 1538

Solved <https://codeforces.com/problemset/problem/1750/D> (1800) in 42 minutes. I realized I needed to find the number of coprimes of X in interval [1, Y] which I didn’t really know so I searched the internet (I think that’s ok). Now I made a template for this

Score: 50 + 20 + 10 -> 80 points

Solved <https://codeforces.com/problemset/problem/1705/D> (1800) in 17 minutes. It was pretty easy once I found the click.

Score: 50 + 30 + 10 -> 90 points

Solved <https://codeforces.com/contest/1648/problem/B> (1800) in 48 minutes. Nice use of kind of Eratosthenes Sieve. A little slow but it’s a 1800 so we are good.

Score: 50 + 20 + 10 -> 80 points

Participated in <https://codeforces.com/contest/2104> (Div2) and solved first 4 problems.. unfortunately I was very close to solve the 5th one, just 2 more minutes needed, I got accepted after the contest :(. That’s it, next time. Anyways, the cheaters on codeforces are getting out of hand.. crazy how many people solved first 5 problems. I am tehnically place 2400 and this is really weird :)))

Day 14: 29/04/2025 -> 1538

Solved <https://codeforces.com/problemset/problem/687/C> (1900) with the help of editorial. I knew it was dp and I tried a solution but it didn’t work.. I couldn’t get the dp states like that. Key note for myself: Try to also think dp as a possible or not possible solution and to update it in the go.. my bad. It took me 50 minutes before looking at the editorial

Score: 10 + 0 + 10 -> 20 points

Solved <https://codeforces.com/problemset/problem/1430/E> (1900) in 28 minutes so really fast. Nice inversion problems but I made a little bit the confusion with some other permutation property where you can make any swap, not necessarily on consecutive cells. I will look a little bit into a problem with this concept

Score: 50 + 30 + 10 -> 90 points

Solved <https://codeforces.com/problemset/problem/1082/E> (2000) with the help of some solutions and tutorials from comments in editorial. I made a dp solution and a divide and conquer one. I understood them both. I thought about a segment tree solution initially but no success, also binary search, dp but I couldn’t see how to oprimize and of it and get to a solution. Pretty hard for my first 2000 but the solutions were so nice, I always feel stupid after seeing them.

Score: 10 + 0 + 10 -> 20 points

Solved <https://codeforces.com/problemset/problem/1781/D> (1800) after a small hint from editorial.. I really didn’t think to try and get an equation out of 2 numbers to find all possible values of x.. as soon as I saw for a moment this idea I managed to implement the solution by myself :(((. Tip for myself: try to write more things down and find things that are unknown..

Score: 20 + 10 + 10 -> 40 points

Solved <https://codeforces.com/problemset/problem/1148/D> (1800) in 31 minutes alone so that is a success. Another adhoc problem, glad I solved it.

Score: 50 + 20 + 10 -> 80 points

Solved <https://codeforces.com/contest/623/problem/A> (1800) in 42 minutes with a little bit of help by looking at tests. I didn’t think it’s necessary to check the validity of the graph at the end. Also, nice catch with the fact that nodes with b are only the ones connected to all other nodes, idk why I didn’t made that ovservation.

Score: 40 + 20 + 10 -> 70 points

Day 15: 30/04/2025 -> 1604

Solved <https://codeforces.com/problemset/problem/540/D> (1900) in 47 minutes because it felt vague on how the probability at each turn is calculated, my bad..

Score: 40 + 20 + 10 -> 70 points

Solved <https://codeforces.com/problemset/problem/1585/D> (1900) in 51 minutes fully by myself. Nice problem using FenwickTree actually. Cool observations and I was a little bit slow on time but hey.. at least I solved it. After this I spent some time to better understand what a 3 cycle is and how it can be represented as 2 separate transpositions on the array. Now it makes so much more sense. I actually solved it by creativity, how am I so bad at math ? :)

Score: 50 + 10 + 10 -> 70 points

Day 16: 01/05/2025 -> 1626

Participated in <https://codeforces.com/contest/2108> (Div2) with a performance of a 1540, solving A, B, C. It’s pretty frustrating to be honest.. This was my 6th contest and now my rating is stabilized. I will work on my skills for 3 months and starting with august I will participate again for 2 months. Hope that I will reach 1900 in those 3 months and have an average performance over 1850, I think this is decent expectations.

Solved <https://codeforces.com/problemset/problem/1674/F> (1800) in 37 minutes. This was an implementation problem, really nice for me to start not overcomplicate solutions. I also red after a really nice solution that transforms the matrix into an actual array, really cool concept

Score: 50 + 20 + 10 -> 80 points

Day 17: 02/05/2025 -> 1626

Solved <https://codeforces.com/contest/1500/problem/A> (1800) but only after a small peak at the editorial.. I really didn’t think that bruteforce was the right call here, lool. The idea was pretty easy once realizing that we can’t go more than min(n^2, 2\*2.5\*10^6)…

Score: 20 + 0 + 10 -> 30 points

Solved <https://codeforces.com/contest/1619/problem/D> (1800) but again... I thought about binary search but not on the simple idea that I just need to make sure there is at least one shop that can buy a gift for 2 people.. idk man, how am I so bad?

Score: 20 + 0 + 10 -> 30 points

Attempted <https://codeforces.com/contest/1552/problem/D> (1800) but with no success. Even after editorial it feels really off and I can’t understand it properly. Will come back to this after a while with new powers.

Score: 0 + 0 + 0 -> 0 points

Ok, now important. I think about starting a “Group Solving”, what I mean is selecting 5 problems from each of 3 diffculties above my rating, that being 1800, 1900 and 2000, 15 problems total. I will try to not waste more than 1 hour and 15 minutes on a problem + editorial that should be max 2 hours per problem. I will see how many points I can get per group and what is the total time of completion. Once I consistently get 70+ points and I have decent solving time I will upgrade to next difficulty like in a window. Wish me luck. Starting with group 2 I will not upsolve the problems immediately. I will try and if I don’t see the solution I will leave them as they are and when getting through other 3 groups I will get back to that group. For example If I have an unsolved problem in group 2 I will try it again after finishing group 5.

GROUP 1:

1800:

<https://codeforces.com/problemset/problem/300/C> 1800 - Score: 90 Time: 22 minutes

<https://codeforces.com/problemset/problem/1841/C> 1800 - Score: 70 Time: 56 minutes

<https://codeforces.com/problemset/problem/1861/D> 1800 – Score: 0 Time: 70 minutes

<https://codeforces.com/problemset/problem/721/C> 1800 – Score 30 Time: 90 minutes

<https://codeforces.com/contest/1466/problem/E> 1800 - Score 90 Time: 25 minutes

Time to fully get through 1800’s: 263 minutes with average score of 56 so not too amazing

1900:

<https://codeforces.com/problemset/problem/1238/D> 1900 - Score 70 Time: 52 minutes

<https://codeforces.com/contest/459/problem/E> 1900 - Score 80 Time: 38 minutes

<https://codeforces.com/problemset/problem/1920/D> - Score 80 Time: 29 minutes

<https://codeforces.com/problemset/problem/1918/D> - Score 10 Time:

<https://codeforces.com/problemset/problem/2040/D> - Score 10 Time: 100 minutes

Time to fully get through 1900’s: 319 minutes with average score of 50. I would say okish.. I hope to get a +40 score for 2000 problems.

2000:

<https://codeforces.com/problemset/problem/1900/D> 2000 - Score 10 Time: 130 minutes

Group1, problem1 (1800) - <https://codeforces.com/problemset/problem/300/C>

Solved it nicely with modinverse in 22 minutes, nice problem. Seemed dp at first but then I got it, I just used bruteforce for it to find how many a’s and b’s the number has.

Score: 50 + 30 + 10 -> 90 points

Group 1, problem 2 (1800) <https://codeforces.com/problemset/problem/1841/C>

Solved it in 56 minutes with greedy approach somehow keeping count of the sum to right and sum to left and elements in the left not affected yet by any bigger number after them. This way I could bruteforce every position pretty nicely. I also spent some time and solved it with dp as the editorial suggested. I didn’t think of keeping max till now actually, that’s why dp was not working in my head at first. Also greedy approach is very nice as well, didn’t think of that

Score: 50 + 10 + 10 -> 70 points

Day 18: 03/05/2025 -> 1626

Group 1, problem 3 (1800) <https://codeforces.com/problemset/problem/1861/D>

Really annoying implementation and case forces problem, I really didn’t like it but I also missed some core ideas so yeah.. bad problem for me overall. I would give myself a 0 score on this

Score: 0 + 0 + 0 -> 0 points

Group 1, problem 4 (1800) <https://codeforces.com/problemset/problem/721/C>

I really enjoyed this problem. I tried to solve it with Dijkstra but I got wrong answer on test 26 because this isn’t a correct approach. Then I got a hint from editorial that it’s dp on a graph and I did it by myself but with TLE on test 11 because I tried to manually verify that all parents of current node are already processed and this was slow. Then I made the solution with TopologicalSort and it was really nice.

Score: 20 + 0 + 10 -> 30 points

Group 1, problem 5 (1800) <https://codeforces.com/contest/1466/problem/E>

Interesting bits operations problem, solved it in 25 minutes so pretty good result.

Score: 50 + 30 + 10 -> 90 points

Day 19: 04/05/2025 -> 1626

Group 1, problem 6 (1900) <https://codeforces.com/problemset/problem/1238/D> I solved it in 52 minutes which is very slow I am honest but I kept discovering more and more properties, of.. I feel like I could have been way faster

Score: 50 + 10 + 10 -> 70 points

Group 1, problem 7 (1900) <https://codeforces.com/contest/459/problem/E> I solved it in 38 minutes which is really nice, I also solved it the most optimal way possible.

Score: 50 + 20 + 10 -> 80 points

Day 20: 05/05/2025 -> 1626

Group 1, problem 8 (1900) <https://codeforces.com/problemset/problem/1920/D> I solved it in 29 minutes. To be fair I had a small hint because I solved this problem a bit more than a year ago so I knew it was with binary search. Nice problem overall

Score: 40 + 30 + 10 -> 80 points

Group 1, problem 9 (1900) <https://codeforces.com/problemset/problem/1918/D> I didn’t solved it but understood the solution. Nice way of keeping best possible candidates in a set with sliding window technique. I will upsolve it tomorrow. I though about using binary search but couldn’t figure out how to calculate dp[i] or how to truly check if a value <= m is possible or not.

Score: 0 + 0 + 10 -> 10 points

Day 21: 07/05/2025 -> 1626

Group 1, problem 10 (1900) <https://codeforces.com/problemset/problem/2040/D> I didn’t solved it.. :(( I tried different solution but missed some simple ones.. I solved it easily after the editorial, of..

Score: 0 + 0 + 10 -> 10 points

Day 22: 09/05/2025 -> 0 (I actually changed my account cause I really loved this new handle, this will be the only time, I promise)

Group 1, problem 11 (2000) <https://codeforces.com/problemset/problem/1900/D> . Hard problem in my opinion, I couldn’t solve it as I didn’t know the trick:

In order to calculate how many pairs (x, y) have gcd(x, y) = k

you can have the formula:

gcd(x, y, k) = how many pairs x, y have gcd = k

cnt(x, y, k) = how many pairs x, y have the divizor k (not gcd)

Then:

gcd(x, y, k) = cnt(x, y, k) - gcd(x, y, 2k) - gcd(x, y, 3k) - gcd(x, y, 4k) ....

So you can go backwards and calculate gcd(x, y, k) for all k from 1 to MAX with compelxity

O(M \* log2(M))

For this you can also use mobius formula but it's not that flexible inbetween calculations

So I red the editorial and also some adjacent ideas with mobius formula and solved it by myself. Nice idea and execution, will remember it for future.

Score: 0 + 0 + 10 -> 10 points