Lab Sheet – 10

The purpose of this lab is to get you **solve simple List-based problems**. There are 5 problems from Codeforces to be solved in this week. All the problems require you to iterate through the list(s) in one way or the other, checking some condition, and similar minor operations to compute the result.

- In case you find it hard to solve the problem directly, break the problem goal into milestones **and incrementally implement** your solution.
- Ask for help only after you have tried enough from your side.
- Insert print statements, print values of variables to debug.

Refer to **Python Lists** and **w3schools List methods** for syntax as necessary.

- Understand your role and Python's role in problem solving. Python will not think for you, nor will it give you a solution. You must do all that which makes coding easy.
- The crucial thing is **trying on your own**. Ask for help only after trying enough.
- You don't have to memorize any of the syntax. You can always refer when needed.
- Whatever Python you are taught is more than sufficient to solve the problems given.
- Develop the code from first principles from your raw understanding.

1. Unimodal Array (831A)
   a. https://codeforces.com/problemset/problem/831/A
   b. Try to solve. If it doesn't work, watch the video and then try again.
   c. This problem is little tricky. First work out with variety of examples.
2. Lesha and Array Splitting (754A)
   a. https://codeforces.com/problemset/problem/754/A
   b. If you understand the problem properly, it is very easy. So, first read and understand the problem statement properly.
   c. Just maintaining the sum is enough.
3. Spy Detected (1512A)
   a. https://codeforces.com/problemset/problem/1512/A
   b. Straightforward problem.
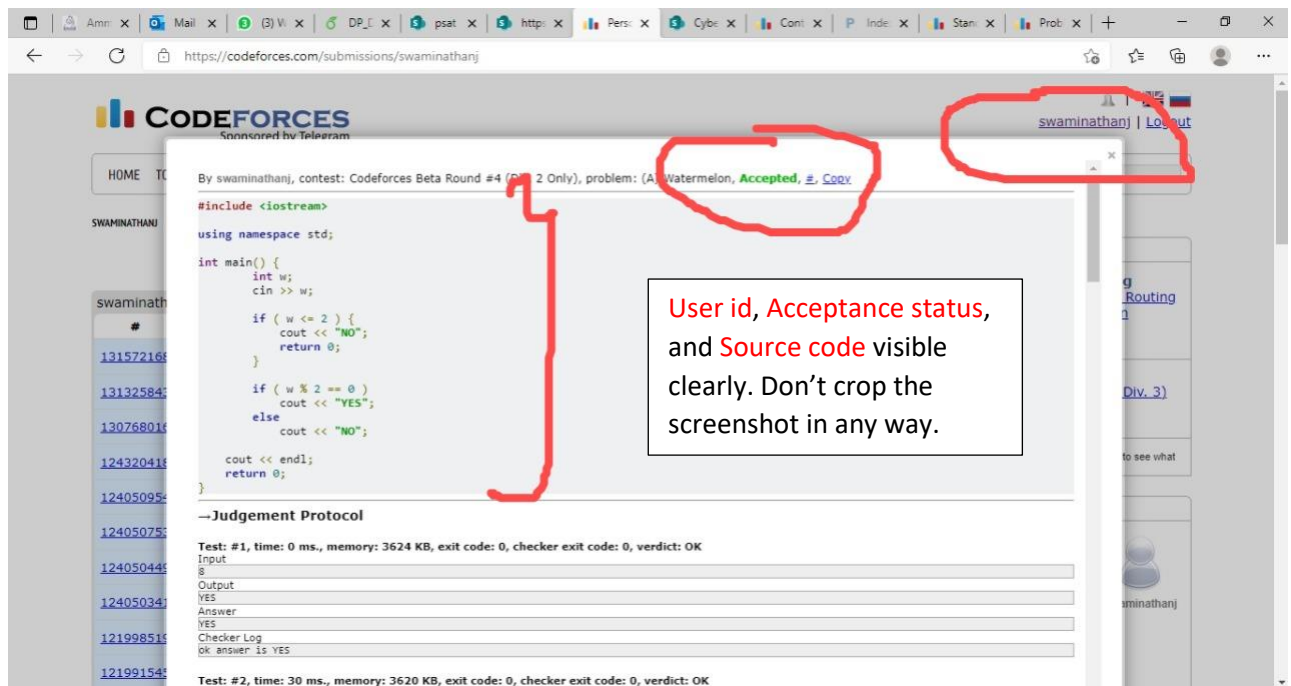   c. Working out different examples on paper should make it simple
4. Review Site (1511A)
   a. https://codeforces.com/problemset/problem/1511/A
   b. Straightforward problem.
   c. Working out different examples on paper should make it simple.
5. The Rank (1017A)
   a. https://codeforces.com/problemset/problem/1017/A
   b. Already solved. Now you can store the input in lists and solve.

Important note: You must try on your own and drill your way through. Don't mind if you struggle. Without struggle, there is no learning. Get used to the struggling and overcoming. That is very normal in problem solving. You can seek help after you have tried enough.

Submission: The proof of acceptance (screenshots) along with source code for all 4 problems must be submitted in Teams → Week 10 - Assignment. Sample format below.

The code shown above is in C++. You submission would have Python code instead.