

## Lab Sheet – 9

The purpose of this lab is to get you **solve simple List-based problems**. There are 4 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.

- **Do not attempt this if** you haven't completed the 20 List Exercises given last week. First complete that.
- Break the problem goal into milestones **and incrementally implement** your solution.
- Ask for help only after you have tried enough from your side.

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. Coding comes after that.
- 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. In search of easy problem (1030A)

- <https://codeforces.com/problemset/problem/1030/A>
- Straightforward problem. One traversal of the list is sufficient.
- Easier than List exercises that you solved last week.

### 2. Coins (1061A)

- <https://codeforces.com/problemset/problem/1061/A>
- This is an optimization problem. Multiple correct answers are possible.
- The sample solutions given may confuse you. You cannot get that particular solution they have given. You need to come up with a correct solution. (Recall dice rolling problem. This is similar.)
- Decide on the correct strategy which is simple math.

### 3. Good Number (365A)

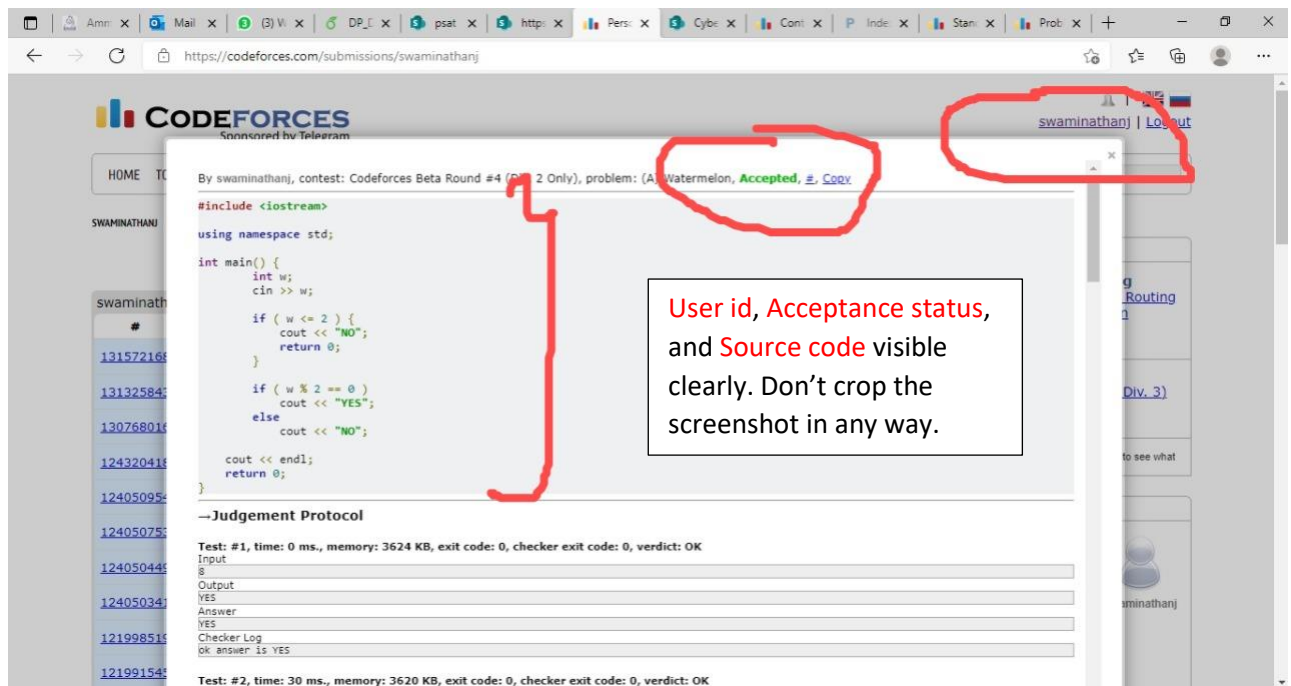
- <https://codeforces.com/problemset/problem/365/A>
- The first line of the problem statement can be understood in two different ways. Depending on that your logic will differ. Only one will be accepted.
- If you don't get a clue after trying, seek clarity with your instructor.

### 4. Police Recruits (427A)

- <https://codeforces.com/problemset/problem/427/A>
- Read this problem multiple times to understand it correctly.
- You may need 2 counters to compute the result.

**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 9 - Assignment](#). Sample format below.



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