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## Task 0

# Solving Assignment

[ Last Updated on: **6th October 2020, 18:26 Hrs** ]

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**Note:** We hope that you have gone through the [Tutorials](#) document and understood the syntax of **Python** and **Lua** language. If not, then please do that before trying to solve the assignment over here.

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In this document you will apply the basic usage of Python and Lua language learnt from the Tutorial and solve the assignment.

This assignment is a little different, in a way that it's actually a **team-contest** hosted on [CodeChef](#).

- [Team-Contest Description](#)
- [How do I access the Team-Contest?](#)
- [General Instructions](#)

What's **CodeChef** you ask?

Well, CodeChef is a global [competitive programming](#) platform. It is an educational initiative started by **Directi** which hosts many coding contests and has a large community of programmers that help students and professionals test and improve their coding skills.

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## Team-Contest Description

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We will be using this platform to test your **Python** and **Lua** programming skills. Let's see what this assignment or team-contest has in store for you.

You can access the Contest page from here: <https://codechef.com/PYLT2020/>. Refer to section: [How do I access the Team-Contest?](#) for more details.

- To participate, you will have to first register for the contest. The registration will start from **06-10-2020 00:00:00** and will end on **11-10-2020 23:59:00**. **Make sure you register your team sooner**. There will be **no deadline extension** in any circumstances.
- The contest will start from **08-10-2020 00:00:00** and will end on **19-10-2020 23:59:00**.
- The contest will have **10 problems**:
  - **5 problems** based on *Python* programming
  - **5 problems** based on *Lua* programming
- **Each problem** has the maximum score of **100 points**.
- **Each problem** is divided into multiple **subtasks** and the **100 points** are distributed over these subtasks. The points awarded for each subtask will be mentioned in the description of that problem.
- **Each subtask** will have few **test cases** associated with it.
- To obtain all the points associated with a **subtask**, your program will have to clear or pass all the test cases. Failing even **one test case**, will result in **0 points** for that particular subtask.
- Your performance in this assignment will contribute to the overall score of **Task 0**.

Now that you are aware of the overall assignment or contest structure, let's zoom in on the structure each problem will follow.

1. **Problem**: A brief description of the problem statement.
2. **Input**: It describes the format in which the input to a program will be provided.
3. **Output**: It describes the format an output of a program *must* follow.
4. **Constraints**: As the name suggests, it will tell you the limits/range of values a variable will have.
5. **Subtask**: This section will mention all the subtask and the points associated with each subtask.
6. **Sample Input**: It shows an example input to a program, based on its format mentioned in *Input* section above.
7. **Sample Output**: It shows an example output of a program for the corresponding *Sample Input* based on its format mentioned in *Output* section above.
8. **Explanation**: This section explains the problem using the *Sample Input* and *Sample Output* as a reference.

Given all the above details, one might wonder how to feed the input values of test cases to the code. You need not worry about that. Just assume there is a user at the other end who is inserting the input to your program. You just have to read and parse the values.

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### A word of caution:

While displaying the results, make sure you display it in the exact format as is specified in the problem. An extra space in the output can cause the code to fail the test case.

Here's a list of possible remarks for the output you might get. You can also find this list on the right bottom corner of the problem page.

After you submit a solution you can see your results by clicking on the [My Submissions] tab on the problem page. Below are the possible results:

- **Accepted** ✓ Your program ran successfully and gave a correct answer. If there is a score for the problem, this will be displayed in parenthesis next to the checkmark.
- **Time Limit Exceeded** ⚡ Your program was compiled successfully, but it didn't stop before time limit. Try optimizing your approach.
- **Wrong Answer** ✗ Your program compiled and ran successfully but the output did not match the expected output.
- **Runtime Error** ⚠ Your code compiled and ran but encountered an error. The most common reasons are using too much memory or dividing by zero. For the specific error codes see the help section.
- **Compilation Error** ⚠ Your code was unable to compile. When you see this icon, click on it for more information.

## How do I access the Team-Contest?

- Click on this link: <https://codechef.com/PYLT2020>. Read all the instructions mentioned on the page **carefully**.
- All **four team members** should create an account using the same **email address** that they used to register on the eYRC portal. If you already have a CodeChef account, simply login to your account with your user ID. *Please make sure you use the same email address that you used while registering for eYRC.*

**Note:** It is recommended that the next step is performed by team leader ONLY.

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- To participate in the contest, you will have to register a team with the **Team Login ID** as **nb\_<Team-ID>** and **Team Display Name** as **NB\_<Team-ID>**. So, if your **Team ID** is **9999**, you will create the team with **Login ID** as **nb\_9999** and **Display Name** as **NB\_9999**.
- Add the CodeChef user ID of your **four team members** to register a team. Ensure that you are the correct user ID of your team members since the user ID is *case sensitive*. Set a common **team password** that is easy to remember amongst your four team members. The other **three team members** will receive an invite to join the team.
- Once registered, click logout in the top right corner and login using the **Team Login ID** and **team password** you registered with. There is a limit of one user per session, so only one team member should login with **Team Login ID**.
- A student can be part of **only one** team with which he/she registered for eYRC.
  - DO NOT** change team compositions at this stage.
  - NO** participant should be part of more than one team.
  - Students **not abiding** by this rule will result in all the team members getting **disqualified** from the competition.
- Once you have formed the team, you can enter the contest here: <https://codechef.com/PYLT2020>.
- You will find the list of **10 problems**. Clicking on one of these problems will lead you to the problem page where you will find all the details of that particular problem.
- All that's left now, is to start solving the problem and submit your solution.



eYRC 2020-21: Nirikshak Bot (NB)

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## General Instructions

- Stuck somewhere? Can't figure out the solution? Approach us on Piazza.
- If your friend is stuck somewhere and can't figure out the solution then ask him/her also to contact us on Piazza but do not share the code. Everyone is here to learn.
- In case you have questions, specifically regarding any task, please post a query on Piazza. You will get an answer from us within 24 hrs.
- While performing this task, please refrain from using any other forum or medium like email or social media to ask your queries.
- Just sweep through Piazza once before asking a question. Many times, the same or similar kind of question is already answered.

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**ALL THE BEST !!**

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