# **Tryouts Tasks**

### **Submission Guideline**

Make a repository in GitHub with the name club-tasks and please store your results and project code in the respective folders with the name task-# (where # is the task number). You can explain how you have approached the solution in a README.MD file.

### 01. Web Scraping

Can you write a Python script that scrapes (web-scraping) information about the 10 most COVID affected countries with the details (total cases, total deaths, and total recovered) from worldometers.info and write it to a CSV file.

### 02. Captcha Automator

Create a python script which can automatically calculate the result of an arithmetic captcha image. You can download/create an image file which contains a simple arithmetic expression like "2 + 2", "6 + 9" etc. Your python script must be able to interpret the expression, evaluate it and return the calculated value.

### 03. Bandit

Complete Bandit till level 10.

Refer: <a href="http://overthewire.org/wargames/bandit/">http://overthewire.org/wargames/bandit/</a>

Please store the password of each level in a .txt file and upload it to your project repository.

## 04. Programming

Solve the following problems from HackerRank and Codeforces in **Python/C/C++** or any other programming language. We will be evaluating everyone's code submissions, so please don't copy the code. Show us what you did and we'll be happy with it.

*Try:* <u>https://www.codechef.com/ide</u> to run your solutions

#### HackerRank:

https://www.hackerrank.com/challenges/compare-the-triplets/problem

https://www.hackerrank.com/challenges/diagonal-difference

https://www.hackerrank.com/challenges/staircase/problem

https://www.hackerrank.com/challenges/birthday-cake-candles/problem

https://www.hackerrank.com/challenges/time-conversion/problem

#### **Codeforces:**

http://codeforces.com/problemset/problem/1/A

http://codeforces.com/problemset/problem/71/A

http://codeforces.com/problemset/problem/158/A

http://codeforces.com/problemset/problem/282/A

http://codeforces.com/problemset/problem/96/A

Please push your solutions to the task-4 folder and in the respective HackerRank and Codeforces sub-folders.

## 05. Spammer\_Spaghetti

Do all modern web browsers have a console in them? What can you do in this console? Spam your lazy friend with lots of 'Hi' messages on the telegram web using JavaScript. Please add the JavaScript file in the task-5 folder in your repository.

https://www.w3schools.com/js/js htmldom html.asp

### 08. Pokedex

Make a pokedex website that lists pokemons using HTML, CSS & JS. Use this API to make it - <a href="https://pokeapi.co/api/v2/pokemon/">https://pokeapi.co/api/v2/pokemon/</a>

# 09. Login Form

Make a simple website using HTML and CSS. Make a validation form to get the input from the user (email-id, username, and password). Validate whether the username and password are correct. If it's correct then show "Login successful" in a separate page.

### 10. Send a tweet using Python

Here we intend to make an application where you would take an input from the user and after that tweet that input. One possible approach you could take is like:

- Create a twitter app and generate key
- Store Credentials of the user in a separate file "tokens.py"
- OAuth Authentication where you would import the tokens and using tweepy.AuthHandler complete the authentication
- Get input from user about the tweet about to be send
- Update the tweet using update\_status of tweepy API.

### 11. Stone Paper Scissors Telegram Bot

We assume that all of you have played this at least in your childhood. Battle yourself with the computer to be the king, the basic rule for the game is that you and the computer both choose rock, paper or scissors the winner is decided based on:

- Rock blunts scissors.
- Paper covers rock.
- Scissors cut paper.

You need to develop a simple telegram chatting bot where you could chat with a bot for playing this stone paper scissor game. Use the telebot API for this development