Problem Solving Session

- The remainder of today's class will comprise the ***problem solving session*** (***PSS***).
- Your instructor will divide you into ***teams of 3 or 4 students***.
- Each team will ***work together*** to solve the following problems over the course of ***20-30 minutes***.
  - You may work on paper, a white board, or digitally as determined by your instructor.
  - You will submit your solution by pushing it to GitHub before the end of class.
- Your instructor will go over the solution before the end of class.

Class participation is a significant part of your grade (20%). This includes in class activities and the problem solving session.

Your graders will grade your participation by verifying that you pushed your solutions before the end of the class period each day.

1. Create repository in the git
2. Create the project in git to keep everything saved and secured
3. "If" you are starting in a new pc, you can clone it.
4. You can add comments in python and brainstorm ideas for your programs
5. You should make statements / strings to create a successful alogrithem

Problem Solving 1

For your next homework assignment, you will be writing and submitting multiple, small Python programs.

Assuming that you are sitting down to begin work on a new computer, list every step that you should perform to complete and submit the first program*.

** Obviously you don't know the specific details of what the program needs to do - just think about the generic steps you need to go through.*

Problem Solving 2

There are at least 3 different ways to execute a Python program discussed during today's lecture. List as many as you can remember along with at least one pro and one con for each.

Indicate which option each team member prefers the most and plans to use during class and/or on their assignments.

1. Powershell
Pro: Runs instantly
Con: It doesn't save the work
1. Pycharm
Pro: integrated, it saves work and there's VCS
Con: It takes longer to run
1. Colab
Pro: Saves work instantly
Con: It runs very slowly

Hamad: Visual Studio Code
Avasyu:Pycharm
Zahra: Powershell

Problem Solving 3

Below is an example of a diamond shape printed using only the asterisk (*) character.

Choose some other shape and write the code to print it using the character(s) of your choice.


```
Print("***************")
```

```
Home_state = input("NY")
Home_city= input("West Henrietta")
Streetname= input("Dutchess Rd")
Zip_code= input("14583")
House_number= input("1347")

Print(Home_state)
Print(Home_city)
Print(Streetname)
Print(Zip_code)
Print(House_number)
```


Problem Solving 4

Write the code to prompt the user to enter the two letter abbreviation for their home state (e.g. "NY"), home city, street name, zip code, and house number (in that order). Then print their properly formatted mailing address.

```
Enter your home state: NY
Enter your home city: West Henrietta
Enter your street name: Dutchess Rd.
Enter your zip code: 14583
Enter your house number: 1347

Your mailing address is:
1347 Dutchess Rd.
West Henrietta , NY 14583
```