Yoel Buzgarb

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.
- If there is any time remaining, you will begin work on your homework assignment.

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

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1) make a directory and ~~clone~~ git clone into that.

2) then "code." in git bash which will open all in the IDE

3) make changes as necessary for homework

4) follow git workflow add, commit, push

5) check github if its in repository.

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) run from vscode
pro: easy 1click con: doesn't show information
2) run from command line
con: might have to type more
pro: better for info
I prefer command line

Problem Solving 3

In the space to the left, write the code to print the name and hometown of each of your team members. Include a blank line between each in the output.

```
Hermione Granger
Heathgate, Hampstead

Harry James Potter
Godric's Hollow

Ron Weasley
Ottery St Catchpole, Devon
```

```
Print("Seth Foster/n Frederick, MD",
end="/n")
        ^x2
Print("Yoel Buzaglo/n Tel Aviv, ISRAEL",
end="/n")
        ^x2 add another /n

Print("Yoel Buzaglo", "Tel Aviv, ISRAEL",
sep="/n", end="/n/n")

Print("Seth Foster" "Frederick, MD",
sep="/n", end="/n/n")
```

Problem Solving 4

In this unit we saw that Python variables have *scope*, i.e. the places in the program where they can be accessed. In the space to the right, list the types of scope that variables can have along with a short code example.

```
GLOBAL_1 = "ABC"

def some_function():
    local_var = "123"
    print(GLOBAL_1)
      ↗ can access global
    print(local_var)
      ↗ can access local variable
         within function

print(local_var)
  ↗ will NOT work, since its outside
                              of scope
```

Problem Solving 5

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.

```
def print_order(state, city, street, zip, house_num):
    print("Your mailing address is:")
    print(house_num, street)
    print(city, state, zip)


def main():
    home_state = input("enter_state")
    city = input("enter_city")
    street_num = input("enter_street num")
    zip = input("enter_zip")
    house_num = input("enter_house_num")
```

```
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
```