PSP0201

Week 4

Writeup

Group Name: Mojo Jojo

Members

ID	Name	Role
1211101390	Aslamia Najwa Binti Ahmad Khadri	Leader
1211100431	Mohammad Omar Torofder	Member
1211103388	Vishnu Karmegam	Member
1211103092	Farryn Aisha Binti Muhd Firdaus	Member

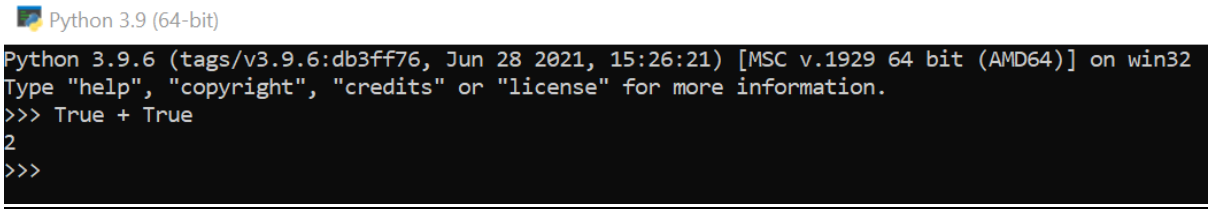
Day 15 : Scripting – There's a Python in my stocking

Tools used: Python, VS Code

Solution/walkthrough:

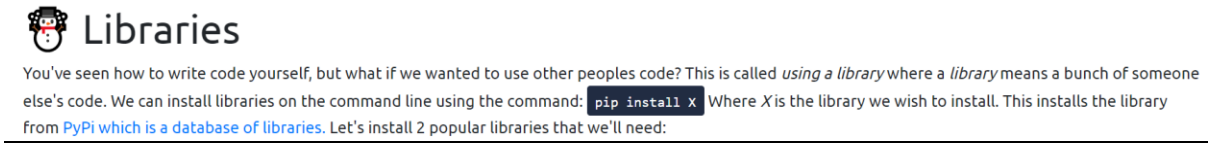
Question 1

Open Python. Type in "True+True" and copy the result.



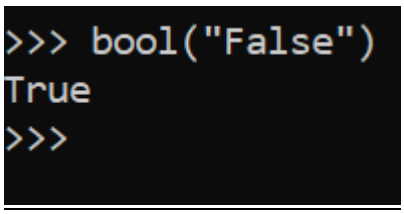
Question 2

Read and find the name of the database used for installing other people's libraries.



Question 3

Open Python. Type in bool("False") and copy the result.



Question 4

Read and find the library which lets us download the HTML of a webpage. Requests downloads webpage and stores it as a variable.

```
# Import the libraries we downloaded earlier
# if you try importing without installing them, this step will fail
from bs4 import BeautifulSoup
import requests

# replace testurl.com with the url you want to use.
# requests.get downloads the webpage and stores it as a variable
html = requests.get('testurl.com')
```

Question 5

Open Python. Type in the following program of code and copy the result.

```
>>> x=[1,2,3]
>>> y=x
>>> y.append(6)
>>> print(x)
[1, 2, 3, 6]
```

Question 6

Read and understand what causes the previous task to output that. Then, copy it.

Now let's say we wanted to add this variable to another variable. A common misconception is that we take the bucket itself and use that. But in Python, we don't. We **pass by reference**. As in, we merely pass a location of the variable — we do not pass the variable itself. The alternative is to pass by value. This is very important to understand, as it can cause a significant amount of headaches later on.

Question 7

The input was true, thus “The Wise One has allowed you to come in.” will be printed.

```
names = ["Skidy", "DorkStar", "Ashu", "Elf"]
name = input("What is your name? ")
if name in names:
    print("The Wise One has allowed you to come in.")
else:
    print("The Wise One has not allowed you to come in.")
```

Question 8

The input was false, thus “The Wise One has not allowed you to come in.” will be printed.

```
names = ["Skidy", "DorkStar", "Ashu", "Elf"]
name = input("What is your name? ")
if name in names:
    print("The Wise One has allowed you to come in.")
else:
    print("The Wise One has not allowed you to come in.")
```

Thought Process/Methodology:

Firstly, we installed the latest version of Python and opened it. We then typed in “True+True” and clicked enter to receive the result. Next, under the Libraries section, we read and found the name of the database that was used for installing other people’s libraries. Once found, we copied it. We opened Python again to type in bool(“False”) in order to find the output of it. Later, under the pip3 install requests beautifulsoup4, we read and found the library which lets us download the HTML of a webpage. Once found, we copied it. Next, based on the program provided in “Code to analyse for Question 5” in today’s material, we ran the code in Python to find the output of it. Once the output has been produced, we copied it including the spacing. Finally, we read the Variables section and understood what caused the previous task to output that. That was because y was pointing at x and x was pointing at the actual value which sums up the definition of “pass by reference”. We proceeded on examining the following code given for the next question. The input was known to be True as the string(input) stated was listed in the names, thus the printed value would follow print() under the ‘if’ condition. Lastly, we checked on the next input given and it was known to be False as the string(input) was case sensitive even if it was listed in the names, thus the printed value would follow print() under the ‘else’ condition.