CYSC 250 Basic of Cybersecurity Programming & Networking
Total Points: 50

Purpose: This assignment provides you with a basic understanding and practical experience of
fundamental concepts of Python.

Requirements & Submission:

1. The answers of this assignment can be submitted electronically on Canvas.

2. Don't forget to write a question number corresponding to your answer.

3. You need to include a screenshot of the executed code. Also, the Python code must be
submitted in order to get partial credit if there is an error in your code.

Question (1) (20 points)

a. What are the different data types available in Python?

-Many different data types can be used within Python. Each data type offers a different way to apply data or functions to a program. Common data types are "numeric types (int, float, complex), string (str), boolean (bool), and collection types (list, tuple, dict, set)." (Pankaj, 2024).
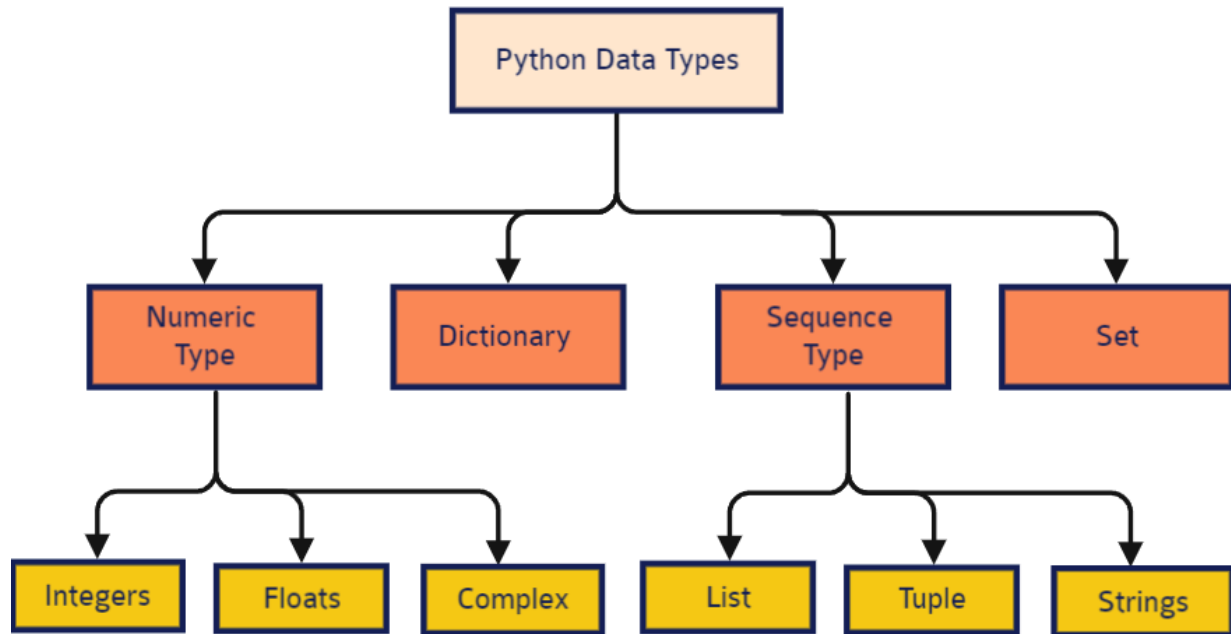
Int allows you to use integers and will calculate integers automatically.

Strings are a sequence of characters typically used to type plain English

Booleans are true or false statements

List- allows you to create a list or order things

Dict allows you to store a preset description for an input.

b.What is the difference between a string and a list in Python?

Strings are not able to be changed once they are set. Strings also consist of characters that make up the input. The list on the other can be altered or changed. Lists are made of objects not characters therefore they can be moved or altered. A string can't be altered because it would disrupt the purpose and input.
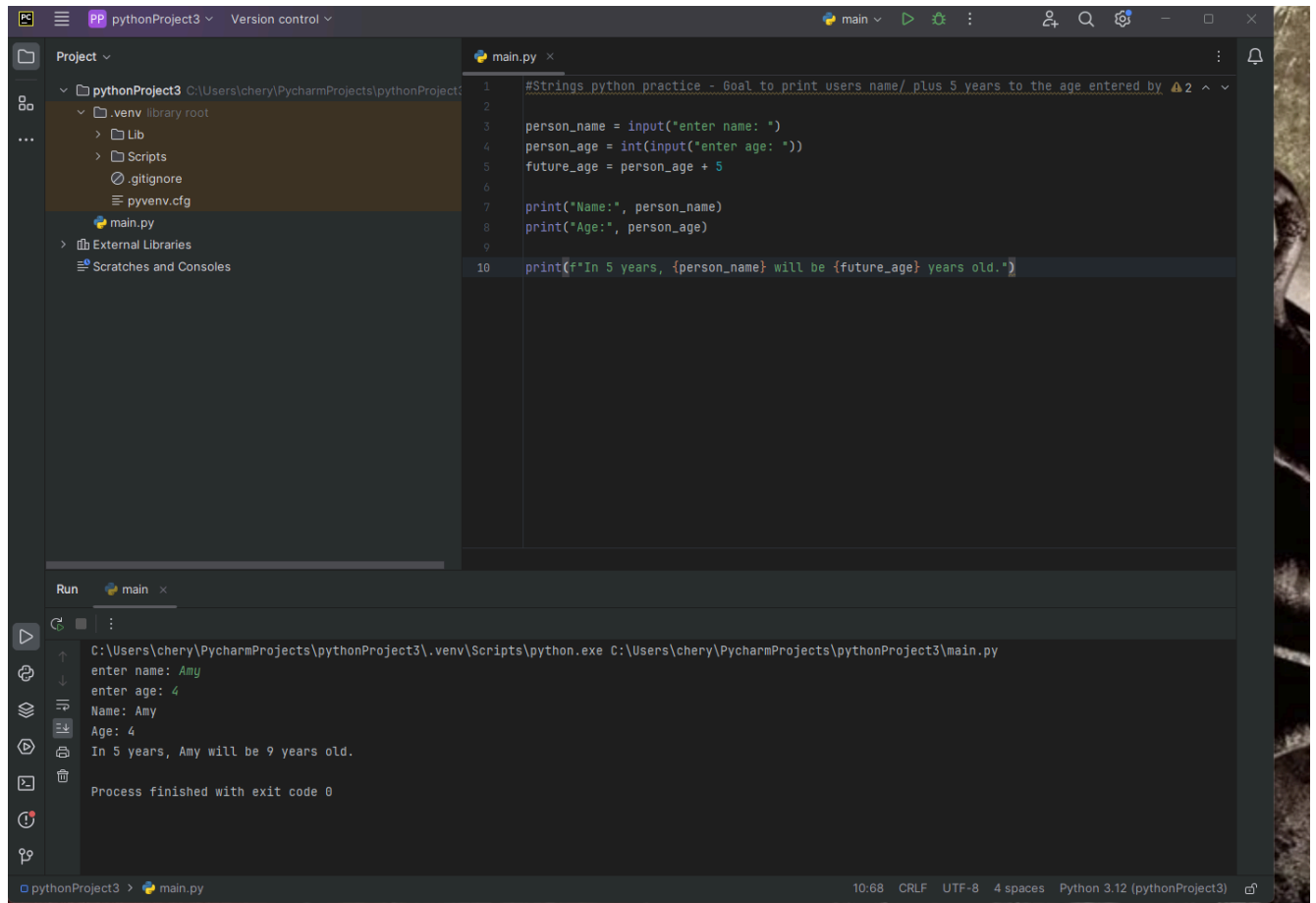
Question (2) (30 points)

Write a program in Python to achieve the following tasks:

Type two statements. The first reads user input into person_name. The second reads user input

into person_age. Use the int() function to convert person_age into an integer.

Print your input variables.

```python
#Strings python practice - Goal to print users name/ plus 5 years to the age entered by

person_name = input("enter name: ")
person_age = int(input("enter age: "))
future_age = person_age + 5

print("Name:", person_name)
print("Age:", person_age)

print(f"In 5 years, {person_name} will be {future_age} years old.")
```

Run output:

```
C:\Users\chery\PycharmProjects\pythonProject3\.venv\Scripts\python.exe C:\Users\chery\PycharmProjects\pythonProject3\main.py
enter name: Amy
enter age: 4
Name: Amy
Age: 4
In 5 years, Amy will be 9 years old.

Process finished with exit code 0
```

Below is a sample output for the given program if the user's input is Amy 4
In 5 years Amy will be 9

Citations

Pankaj. (2024, February 22). Python data types. DigitalOcean.
https://www.digitalocean.com/community/tutorials/python-data-types