Week 1 Exercise: Getting Started with Python (Hello World!)

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Instructions

This assignment has two sections. The first section includes 5 multiple choice questions. The second part of the assignment is a coding exercise.

If you have any questions on how to start or if you get stuck, refer to the discussion board and ask your questions there. You are allowed to use your notes, lectures and the internet. Students can work together on the question portion and discuss the coding exercise. For the coding exercise, you are allowed to talk to other classmates but you cannot have the same code.

Multiple Choice (1 point each)
Please mark your response in bold.

1. Data types are (select all that apply):
    - **a. Numbers**
    - **b. Lists**
    - **c. Strings**
    - d. Classes

2. Review the following:

```
def temp(Celsius):
        “””
        This is used to calculate the temperature in Celsius
        “””
                Temp_c= (temp-f -32)* 5/9
```

This is an example of:

- a. float
- **b. function**
- c. Boolean
- d. None of these

3. When naming variable names you should (select all that apply):
    a. **Use abbreviations**
    b. **Should be readable**
    c. Have long sentences with symbols
    d. **Represent something within your code**

4. temp=45 is an example of:
    a. **variable name**
    b. equation
    c. array
    d. timestamp

5. Give an example of a string:

```
a = "Rahman, Saaqib"
print(a[2])
```

Coding Exercise (5 points)

Python and other programming languages (sometimes) require brainstorming. For this exercise, I would like you to select either problem 1 or problem 2. Your task is to simply write the logic out and how you would solve this problem. This exercise is meant to be open-ended. Please include assigned data types, strings, equations etc.

- **Problem 1: Find the average of 3 numbers**
- Problem 2: Ask the user to enter a password

Using the NumPy mean() method in order to find the average of 78, 106, and 349:

```
import numpy

avg =
[78,106,349]

x = numpy.mean(avg)

print(x)
```