Practice 0

1) **Given the following Python expressions, indicate the variables, operators, and values:**

    a. data = 12

        Variables:

        Operators:

        Values:

    b. data = a + b * c % a

        Variables:

        Operators:

        Values:

    c. x = x ** (3+1) // a

        Variables:

        Operators:

        Values:

2) **Open the <u>Python Console</u> on PyCharm and type in the following lines of code in the first column and write down the output (if any) in the second column. If you find an error, write down the type of error and explain why in your own words:**

Python code	Output
data = 10	
print(data)	
print(Data)	
Data = 34	
print(Data)	
my data = 56	

my_data = 7.8	
print(my_data)	
3data = "world"	
data3 = "hello"	
data4 = hello	
print(data3)	
hot = 273 + 100	
print(hot)	
273 + 100 = hot	
Data = hot	
print(Data)	
print(Hot + 100)	
print(hot - 100)	
print(data3 + hot + Data)	
print(Data + data + hot)	
print(data / 3)	
print(int(data / 3))	

print(data // 3)	
print(data % 3)	
# print(2+3*4-5/6)	

3) **Each of the following statements has an error or is invalid. Write a valid line of Python code that corrects the statement. Double-check your code in the Python Console:**

    a. *3 + 4 = a*

    b. *oh well = 3 + 4*

    c. *2x = 7*

    d. *3^5*

4) **Find the datatype of the following variables declared in your Python Console in question 2 using the Python built-in function "type( )" and write down the output:**
Example: *type(data)*

Python variable	Output
data	
my_data	
data3	
hot	
hot + 0.5	

5) **Type into the <u>Python Console</u> the following lines of code in the first column and write down the output (if any) in the second column. If you find an error, write down the type of error and explain why in your own words:**

Python Code	Output
X, Y, y = "Hello", 'world!', 3	
print(X + y)	
A, B = 7.5, 8.5, 9.5	
print(X + Y)	
print(x + y)	

6) Write the following Python program in the **<u>PyCharm Editor</u>**:
- Ask the user for **two inputs** (numbers) with a message and store them in 2 different **variables**.
- **Calculate** the addition, subtraction, multiplication, and floor division of the two numbers, and place each result in a separate **variable**.
- **Print** the first two outputs in a single line, separated by a comma.
- **Print** the third and fourth outputs on separate lines with a short message describing the outputs. Use **.format(_)** in the 2 prints.