**ASSIGNMENT-1**

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1. What are the differences between operators and values in the following?

Sollution

\*- Arithmetic operator for multiplication

'hello' - Sting

-87.8 – Float type

- Arithmetic Operator for subtraction

/ - Arithmetic operator for division

+ - Arithmetic operator for Addition

6 – Integer type

2. What is the difference between string and variable?

spam

'spam'

Solution:-

String is defined as a set of alphabets that is enclosed in a single or double quote while, variable is the name assigned to the space in the memory which holds the data.

3. Describe three different data forms.

Solution:- Three types of data forms in python are:

Integer:- Any whole number can be called as an integer.

Float type:- Numeric values with decimals can be termed as float types.

Complex number :- A number that can be expressed in the form of real + imaginary(eg: 3+4j) can be termed as complex type of data.

4. What makes up an expression? What are the functions of all expressions?

Solution:- Variables, calls to functions, values and operators together makes up an expression. Expressions need to be evaluated; thus the functions of operations can be doing some operations with the data such addition, subtraction, comparison, etc. and print the final result.

5. In this chapter, assignment statements such as spam = 10 were added. What's the difference between a declaration and an expression?

Solution:- In the statement spam = 10, spam can be termed as the declaration part as the name of the space in the memory is been declared. The term ‘=’ denotes the expression for assigning the the given vale 10 to the declared memory allocation spam.

6. After running the following code, what does the variable bacon contain?

bacon = 22

bacon + 1

Solution:- After running the above code the variable bacon contains the value as 23.

7. What should the values of the following two terms be?

'spam' + 'spamspam'

'spam' \* 3

Solution:-

'spam' + 'spamspam' = spamspamspam

'spam' \* 3 = spamspamspam

8. Why is it that eggs is a true variable name but 100 is not?

Solution:- With the rules of python, a variable name can not start with an integer thus, ‘100’ can not be a variable name but ‘eggs’ can be as this doesn’t start with an integer.

9. Which of the following three functions may be used to convert a value to an integer, a floating-point number, or a string?

Solution:- To convert any value into integer one must use the function ‘int(value)’. Similarly, for floating point number, one can use ‘float(value)’ and for a string one can write any value inside a single quote(‘ ’).

10. What is the error caused by this expression? What would you do about it?

'I have eaten ' + 99 + ' burritos.’

Solution:-

File ["<ipython-input-16-7f2ebe68fa60>"](https://localhost:8080/), line 1

'I have eaten ' + 99 + ' burritos.’ ^

SyntaxError: EOL while scanning string literal

As we can clearly see, the type of error cased is a syntax error. In order to make it correct I would convert the integer value to string with the following expression str(99), as follows.

'I have eaten' + str(99) + 'burritos.'

To which I would get an output like, I have eaten99burritos.