Assignment 1

1. In the below elements which of them are values or an expression? eg:- values can be integer or string and expressions will be mathematical operators.

\* - Expression

'hello' – Value(String)

-87.8 - value(float)

- Expression

/ Expression

* Expression

6 - Value(Int)

2. What is the difference between string and variable?

Variables are nothing but reserved memory locations to store values.

A string is a sequence of characters and is a type of information you would store in a Variable. Commonly represented in inverted commas.

Eg. x ="Hello World".

Here x is variable and Hello World is a string .

3. Describe three different data types.

Python support primitive data types such as numeric , strings and Boolean data types.

Numeric

These are basically numbers. Eg 100, 150 etc.

String

A string is a sequence of characters and is a type of information you would store in a Variable. Commonly represented in inverted commas.

Eg. "Hello World".

Boolean

The bool datatype represents truth values from logic. This is a built-in data type in python.

In Python, to represent a truth value we use literal True and for a false value we use False.

4. What is an expression made up of? What do all expressions do?

An expression is a construct made up of variables, operators, and method invocations, which are constructed according to the syntax of the language, that evaluates to a single value.

5. This assignment statements, like spam = 10. What is the difference between an expression and a statement?

An Expression always evaluates to a value. And, A statement does something, like creating a variable or displaying a value, it only does whatever the statement says.

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

bacon = 22

bacon + 1

23

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

'spam' + 'spamspam' - spamspamspam

'spam' \* 3 – spamspamspam

Same output.

8. Why is eggs a valid variable name while 100 is invalid?

Variable names cannot begin with a number.

9. What three functions can be used to get the integer, floating-point number, or string version of a value?

Int() to convert in integer

Float() to convert in decimal values

Str() to convert in string.

10. Why does this expression cause an error? How can you fix it?

'I have eaten ' + 99 + ' burritos.'

We cannot concatenate string with integer. We can either use inverted commas on int value or we can use str() function

'I have eaten ' + ‘99 ‘+ ' burritos.'

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