Python 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.**

**\***

**'hello'**

**-87.8**

**-**

**/**

**+**

**6**

**Answer:**

\* is mathematical operator

'hello' is string

-87.8 is float

- is mathematical operator

/ is mathematical operator

+ is mathematical operator

6 is integer

**2. What is the difference between string and variable?**

**Answer:**

Variable is used to store the data.

String is a type of variable. It is a list of characters. Strings are sequences of character data.

**3. Describe three different data types.**

**Answer:**

Integers – This value is represented by int class. It contains positive or negative whole numbers.

Float - It represents the floating-point number. Float is used to represent real numbers and is written with a decimal point dividing the integer and fractional parts.

Complex numbers- These are specified as <real part>+<imaginary part>j

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

**Answer:**

An Expression is a combination of operators and operands that is interpreted to produce some other value. An expression is evaluated as per the precedence of its operators.

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

**Answer:**

Expression is a combination of variables, operations and values that yields a result value.

A Statement is a action or a command that does something. Ex: If-Else, Loops etc

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

**bacon = 22**

**bacon + 1**

**Answer:** 23

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

**'spam'+'spamspam'**

**'spam'\* 3**

**Answer:**

'spamspamspam'

'spamspamspam'

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

**Answer:**

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?**

**Answer:** The int(), float(),and str() functions will evaluate to the integer, floating-point number, and string versions of the value passed to them.

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

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

**Answer:**

Because only strings can be concatenated. As 99 is integer it is causing error.99 should be converted to string.

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