**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.

**Answer: -**

\* - Expressions

'hello' - Value

-87.8 - Value

- - Expressions

/ - Expressions

* - Expressions

6 - Value

2. What is the difference between string and variable?

**Answer: -**

Stings in python are enclosed with single quotes, double quotes, and three single or double quotes.

String is also a data type in python. In python no character data type is there, so single character is a string of length one.

When a value is assigned to a name, that name refers to variable.

3. Describe three different data types.

**Answer: -**

Python numeric data types are used to hold numerical values that are int, float.

Python sting data types are sequence of characters or a single character also.

Python list data type that can hold different type of data in a square bracker [] and separated by commas.

Python Tuple is similar to list but it is immutable and written inside parenthesis () with comma separator.

Python Dictionary is an unordered sequence of data with key-value pair form (key: value) and written inside curly braces {}.

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

**Answer: -**

An expression is a combination of values, variables, operators and calls to functions, the interpreter evaluates it and display the result, which is always a value.

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

**Answer: -**

A statement is an instruction that the python interpreter can execute. An expression is a combination of values, variables, operators and calls to functions, the interpreter evaluates it and display the result, which is always a value. Expressions can appear to the right hand side of the assignment statements.

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: -**

The name of the variable name must begin with a letter. Therefore eggs is a valid variable and 100 is invalid.

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

**Answer: -**

int(), float() and str() are the three functions that are used to get integer, floating-point or string version of a value.

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

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

**Answer: -**

Strings cannot be concatenate with integer value. The correct expression is

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