**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

**Ans1**. \* Is a mathematical operator used for multiplication.

‘hello’ is a value of string data type.

-87.8 is a value of float data type.

- Is a mathematical operator used for subtraction.

/ Is a mathematical operator used for float division.

+ Is a mathematical operator used for addition.

6 is a value of integer data type.

2. What is the difference between string and variable?

**Ans2**. String is a data type, data type means the type of value like integer, float string etc. on the other hand variable is like a container that holds any value.

A variable can hold value of any data type.

3. Describe three different data types.

**Ans3**. Three different data types are Integer, Float, String.

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

**Ans4.** An expression is made up of multiple values and mathematical operators. Expressions are used to evaluate the value based on given inputs.

E.g: b = 3a+2c given a = 4, c = 7

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

**Ans5.** Expression as we know is used to evaluate the value based on given input while statement is an instruction that is used to assign values and do other actions.

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

bacon = 22

bacon + 1

**Ans6.** Bacon will contain value 23.

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

'spam' + 'spamspam'

'spam' \* 3

**Ans7.** Both the statements will give same value

'spam' + 'spamspam' = ‘spamspamspam’

'spam' \* 3 = ‘spamspamspam’

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

**Ans8.** Name of a variable must start with an alphabet not a number that is why eggs is valid and 100 is invalid.

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

**Ans9.** To get integer version we can use int(), to get float wee use float() and to get string we use str()

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

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

**Ans10.** This expression causes error because we cannot concatenate different data type values. We can only concatenate string with other string. To fix it we do the following.

'I have eaten ' + ‘99’ + ' burritos.'

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