# **Abiola D Obembe 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**: expression

'hello'

**Answer**: value

-87.8

**Answer**: value

-

**Answer**: expression

/

**Answer**: expression

**Answer**: expression

6

**Answer**: value

2. What is the difference between string and variable?

**Answer**: a variable is a named location reserved to store values in the memory. A variable is created or initialized automatically when you assign a value to it for the first time

. However, a string is a specific data type used to process text. They typically are encoded with quotes or apostrophe.

3. Describe three different data types.

**Answer:** integer, string and Boolean

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

**Answer:** An expression is a combination of values (or variables, operators or call to functions). Additionally, expressions perform some instruction defined by the user and return a desired output. Specifically, expressions evaluate to a certain value.

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

**Answer:**  an expression is a user defined instruction i.e., a combination of values and operators that evaluates to a certain value. However, a statement does not evaluate to a certain value but rather assigns the value of its right argument to the left, while the right argument may be an arbitrarily complex expression involving literals, operators and already defined variables.

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'

**Answer**: ‘spamspamspam’

'spam' \* 3

**Answer:** ‘spamspamspam’

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

**Answer:** 100 is an invalid variable name because, a python variable name should not start with an integer

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

**Answer:** int(value), float(value), and str(value)

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

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

**Answer**: A integer cannot be concatenated with a string. One way to fix this is to cast the integer 99 as a string.