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

Ans : Values - -87.8, 6, 'hello'

Expressions - \*, -, /, +

2. What is the difference between string and variable?

Ans : String is a data type and Variable is used to store the value

3. Describe three different data types.

Ans : Int – This datatype is used to store the integer values in a variable. Ex : 56, 87, etc

String – This datatype is used to store the characters or a string. Ex : ‘happy’, ‘joy’, etc

Boolean – This is a datatype used to store the Boolean type i.e., True or false.

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

Ans : It is the combination of operators and operands use to perform some action to produce the output. Ex : 5+6 = 11.

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

Ans : Expression Is used to perform certain operation on the values whereas a statement is used for defining the values.

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

bacon = 22

bacon + 1

Ans : 22 + 1 = 23

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

'spam' + 'spamspam' = 'spamspamspam'

'spam' \* 3 = 'spamspamspam'

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

Ans : Variable name can only start with the alphabet or underscore. Hence eggs is valid as it starts with alphabets and 100 is invalid because it starts with number and number, special characters are not allowed to use as variable name.

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

Ans : int(), float (), str()

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

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

Ans : Python can concatenate String with another string but not string with integer. Hence it throws an error.

This can be fixed by writing the code as below :

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