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.

\* - (Expression)

'hello' – (Values)

-87.8 -(Values)

- - (Expression)

/ - (Expression)

* - (Expression)

6 -(Values)

2. What is the difference between string and variable?

String is a combination of characters like numbers, letters, symbols etc. Whereas, Variable is a memory unit where values are stored like strings and integer

3. Describe three different data types.

Numeric- Numeric data types has numeric values which can be either integer, floating value or complex value.

Sequence- Sequence data type is a combination of similar or different data types. These are known as String, Lists and Tuple

Boolean- Boolean data type has only two built-in value ‘True’ , ‘False’.

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

Expression is made up of values, variables, Mathematical operators and operands. An expression is evaluated by the program to find the result.

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

Expression solves or evaluates the given operators and values in variables to a certain value as a result. Whereas, a Statement represents a command in the program. Example, print statement or assignment statement.

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

bacon = 22

bacon + 1

bacon contains 22. Because, (bacon+1) is just incrementing the variable and not storing it. Therefore, bacon will have the same value as stored before.

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?

Variables names cannot begin with a integer. It can be combination of letters and numbers. Example, “Eggs100 “ is a valid variable.

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

int()

float()

str()

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

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

The expression causes an error because, 99 is not an string value. Only strings can be concatenate to strings. To fix it, casting is required. 'I have eaten ' + str(99) + ' burritos.'