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' --- String

-87.8 ---- Floating

- ------ Expression

/ -------Expression

* -Expression

6 --------------- Integer

2. What is the difference between string and variable?

String – The Set of characters, it may alphabet/alphanumeric under double quotation.

Variable – It is an identifier to store the value in allocated memory.

3. Describe three different data types.

Numeric – It represent the type of data is Numbers. Ex: 1231, 4526

Boolean – It has two types of data elements, Ex: TRUE and FALSE

Sequence type – it has different types of data elements, Ex: Strings, List.

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

It’s a combination of Variable, operators and methods to execute the single value as an output.

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

Statement not execute the value but in the case of expression, it will execute the value in single line

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

bacon = 22

bacon + 1

Variable Bacon contains of value 23

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

'spam' + 'spamspam'

'spam' \* 3

Both are having same result but

'spam' + 'spamspam' - It adding the string to the another string, according to that result is spamspamspam

'spam' \* 3 – it gives an o/p as same but in this case execute the spam as three times without spacing.

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

Variable cannot start with number, it will start with alphabets only.

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.'

In this condition expression will execute the error, we have quote the strings only, so it can concentrate the strings only, it can’t add the strings to numeric. If we place 99 under quotes, then statement will give a proper execution.

Ex : ‘I have eaten ‘+’99’+’ burritos.’ Or ‘I have eaten ‘+ str(99)+’ burritos ‘  
Output : I have eaten 99 burritos.