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' :value

-87.8 :value

- :expression

/ :expression

* : expression

6 :value

2. What is the difference between string and variable?

String is combination of the characters and it should have double “” or ‘’ single quotes always and String is one of the data types.

Variable is a kind of entity which stores data and process on runtime.

3. Describe three different data types.

Integer: integer is a variable that specifically stores a numerical value

String: String is a variable which stores the combination of characters, numbers, special characters and it should have double “” or ‘’ single quotes.

Boolean: A Boolean data type is used when we have data like yes/no or True/False.

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

Expressions are made up of values, variables, and operators.

Expressions do all mathematical operators

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

Expression: an expression is a combination of values, variables ,operators and that returns a value

Expressions always evaluate to a value. e.g: x + 3

Statement: assignments are statements and they do not evaluate e.g: assignment are (x = 3 )

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

bacon = 22

bacon + 1

A) 23

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

A) 'spam' + 'spamspam' - 'spamspamspam'

'spam' \* 3 - 'spamspamspam'

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

A) Variable can start with characters, that’s why eggs is valid.

Variable should not start with number that is why 100 is invalid.

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.'

A) str and int cannot be added together, as these are two different data types .it should be the same data type then only we can add

we need to convert int to str to fix this issue as mentioned below

'I have eaten ' + str(99) + ' burritos.'

'I have eaten ' + “99” + ' burritos.'