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?

A). String is an immutable datatype and it has order, reverse, title etc kind of inbuilt functions, whereas Variable will store a value with a proper name. we can perform the arithmetic, logical etc operations on variables. Variable can store any kind of data type.

String type of data can be stored by using a **Variable** name

3. Describe three different data types.

A). String 🡪 used to store character datatypes, denoted by quotes eg: ‘Ramu’

Integer 🡪 will store numerical data. Eg: 3,34,22

Float 🡪 will store decimal data. eg, 34.32, 5.234.

Boolean 🡪 used to store True or False data

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

A). An expression made up of Variables, operators and methods that constructed by syntax of the language, which evaluates to a single value output of any datatype

Eg: 3+83

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

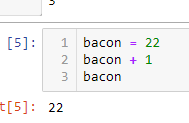
A). An expression is a combination of operators, values and variables to yield a value.

Whereas A statement represents an action or command. Eg, assignment, print statements.

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

bacon = 22

bacon + 1

A). 

variable bacon contains 22.

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

'spam' + 'spamspam'

'spam' \* 3

A). 'spamspamspam'

'spamspamspam'

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

A). Variable names cannot begin with a number. So we can use ‘egg’ as Variable name whereas 100 is integer so as per naming convention it is invalid variable name

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

A). str(), int(), float()

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

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

A). We get error since can’t concatenate string with integer.

For this will convert int datatype to string and then concatenate like this

'I have eaten ' + ‘99’ + ' burritos.'