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?

Variables are symbols which can be used to store the any type of data. Variable is like you are assigning an empty box to store some data. String is one of the datatype. A variable can have datatype as int, float, string etc

3. Describe three different data types.

Str ( for storing string datatypes)

Int (for storing int datatypes)

Float(for storing int or decimal datatypes)

Bool (for storing Boolean datatype)

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

Expression is made up of operators and operands. All expressions are intended to generate some value.

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

a statement can refers to a piece of code that executes a specific instruction or task. Example assignment statement like spam = 10.

Whereas expression evaluates a piece of code to some value. The piece of code consists of of operators, operands etc

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

bacon = 22

bacon + 1

bacon variable value will be 22

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

'spam' + 'spamspam'

'spam' \* 3

'spam' + 'spamspam' will give output 'spamspamspam'

'spam' \* 3 will give output 'spamspamspam'

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

Variable name must start with letter or underscode, variable name cannot start with number. Hence 100 is invalid. Egg is valid variable name because it starts with letter ‘e’

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

Int function gives integer , float function gives floating point number, str function gives string version of a value

int(99.25) gives value 99

float(99.25) gives value 99.25

str(99.25) gives value 99.25

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

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

This gives an error because , you are trying to add integer value with the string datatype.

To fix it, convert enclose 99 in single or double quote. So that all the values become string.

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