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.

\* : mathematical operator for multiplication opearation

'hello' : string datatype

-87.8 : float datatype

- : mathematical operator for subtraction

/ : mathematical operators for divison

+ : mathematical operator for addition

6 : interger datatype

2. What is the difference between string and variable?

String is one type of datatype which holds text. Variable is which points or stores the data and it can be any datatype.

3. Describe three different data types.

int : it holds the numeric data type and holds in perfect integer format

str : it holds the text (alphanumeric and some symbols)

bool : it holds the boolean value True or False

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

Expression is made up of operator on data or variables. These performs given operations on the varibales or data.

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

Here the value intreger 10 will be stored in varibale called spam which is statement.

basically the statements are actions being performed on data or vaiables but whcih will not modify the data.

Expressions are performs given operations on the data or varibales and performs the required task or produce the result

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

bacon = 22

bacon + 1

bacon contains 22 because there is no further assignment happned on bacon varibale.

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

'spam' + 'spamspam'

'spam' \* 3

on both the cases the result is 'spamspamspam'

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

variables are formed by alphanumeric but not only by numerics like integers or float values. So 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.'

Here strings are adding with integer so it is causing error.

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