1)in the below elements which of them are values or an expression.?e.g.values can be integer or string and expression will be mathematical operators.

\*

'hello'

-87.8

-

/

+

6

Ans : Operators: +, -, \*, /

Values: 'hello', -88.5, 5

2 ) what is the difference between string & variables ?

Ans : spam

'spam'

Variable: spam

String: 'spam'

Strings always start and end with quotes

3)describe three different data types.

Ans : Integers, floating-point numbers, and strings.

4)what is the expression made of ?what do all expression do ?

Ans : An expression is a combination of values and operators. All expressions evaluate (that is, reduce) to a single value.

5)This assignment statements ,like spam =10.what is difference between an expression and statement.?

Ans : An expression evaluates to a single value. A statement does not.

6)after running the following code ,what does the variable bacon contain ?

bacon =22

bacon+1

Ans : The bacon variable is set to 20. The bacon + 1 expression does not reassign the value in bacon (that would need an assignment statement: bacon = bacon + 1)

7)what should the values of the following two terms be ?

'spam' + 'spamspam'

'spam'\*3

Ans : Both expressions evaluate to the string 'spamspamspam'.

8)why is eggs a valid variable name while 100 is invalid ?

Ans : Variable names cannot begin with a number.

9)what three functions can be used to get integer ,floating point number,and string version of value ?

Ans : The int(), float(), and str() functions will evaluate to the integer, floating-point number, and string versions of the value passed to them.

10)why does this expression cause an error ? How can you fix it ?

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

Ans : The expression causes an error because 99 is an integer, and only strings can be concatenated to other strings with the + operator. The correct way is I have eaten ' + str(99) + ' burritos.'.