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 variable could be stated as a specific allocated memory with the size of the defined type. It could be string, integer or float or anything. A string is a datatype a variable could be stored.

3. Describe three different data types.

1. Character known as char data type stores data in terms of character.

2. Integer known as int datatype stores any real data ranging from negative infinity to infinity without fraction.

3. Float data type or real data type takes data in terms of any real value with fraction

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

An expression is a combination of operators and operands that are interpreted to produce some value. Expressions could be used to return some specific value or provide conditions and other statements.

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

Expressions can be used to as operands. A statement is more like a declaration.

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

bacon = 22

bacon + 1

22

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

'spam' + 'spamspam'

'spam' \* 3

“spamspamspam”

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

100 is a number that is constant. Egg on the other hand is a name that can be declared and it can allocate some memory.

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

Int() to get integer.

Float() to get float.

Str() to get string.

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

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

This expression is causing error due to performing addition operation of different datatypes. A string is getting added with number then again getting added with a string.

This could be resolved with

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