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' = string,

-87.8 = integer

- = Expression

/ = Expression

* = Expression

6 = integer

2. What is the difference between string and variable?

A String is a type of information you would store in a Variable and a Variable is a store of information.

3. Describe three different data types.

Integer

Float

Boolean

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

An expression is a construct made up of variables, operators, and method invocations, which are constructed according to the syntax of the language, that evaluates to a single value.

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

Statements represent an action or command e.g., print statements, an assignment statement. Expression is a combination of variables, operations and values that yields a result value.

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

bacon = 22, bacon + 1,

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

Both expressions evaluate to the string 'spamspamspam'

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

Variable name cannot be number, and eggs is not a number but string.

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

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.'

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.'.