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 is something which holds/stores the info. It can also hold a string, Boolean etc.

String is generally enclosed in ‘’ and holds text information or basically any info enclosed within the quotes.

Example: Var1 = ‘Python’.

Var1 is the variable and Python is the string.

3. Describe three different data types.

Integer – represents a whole number can be positive, negative and zero. Can’t have decimals.

Boolean – represents true or false, true being 1 and false being 0.

String -- represents text information and is enclosed within quotes ‘’.

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

Expressions are made of mathematical operators, variables , values and are helpful to do computations.

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

Statement is something where it tells what to do, what action to perform here it assigns the integer 10 to the variable spam.

Expression is something which evaluates a value, can be combined using operators etc.

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

bacon = 22

bacon + 1

bacon is 22.

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

'spam' + 'spamspam'

'spam' \* 3

‘spamspamspam’

‘spamspamspam’

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

Variables cannot be numerals.

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.'

So, we are trying to concat string with an integer.

You can enclose the integer in quotes and make it work.