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.

\* - expressions

'hello' - values

-87.8 - values

- expression

/ - expression

* - expression

6 - values

2. What is the difference between string and variable?

A variable basically points to a memory location where the actual data is stored, so when we use a variable in any expression we are basically using the data that is stored in that memory location.

Strings on the other hand is the data enclosed within double quotes.

3. Describe three different data types.

Integer – whole numbers

Floating points – used for decimal numbers

Boolean – represents logical TRUE or FALSE

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

Expressions are made up of variables and operators. They do sum sort of calculation when they are executed.

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

Expression evaluates to give a value. Expression itself is a statement.

Statements are lines of codes

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

bacon = 22

bacon + 1

It will still contain 22 since after adding 1 it is not assigned back to bacon

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

'spam' + 'spamspam'

'spam' \* 3

Output: spamspamspam

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

In python, a variable must start with a letter or an underscore. It cannot start from anything else

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

Int(), float() and str()

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

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

We nee to cast 99 to string type

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