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?

String holds anything as text and Variable holds value.

3. Describe three different data types.

String, List, Tuple

String: They hold data as characters, and they are immutable.

List: They hold different data types, and they are mutable. Consumes more memory.

Tuple: They hold different data types, and they are immutable. Consumes less memory.

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

Expression is made of values and operators. All expressions evaluate to a value.

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

Expression always returns a value whereas statement is just a command or assignment statement or loop which does not return a value.

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

bacon = 22

bacon + 1

23

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

'spam' + 'spamspam' -> ‘spamspamspam’

'spam' \* 3 -> ‘spamspamspam’

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

Variable name does not start with an integer.

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.'

Only string format can be concatenated. So converting 99 into string as ‘99’ will fix the error.