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

- -> expressions

/ -> expressions

* -> expressions

6 -> values

2. What is the difference between string and variable?

A variable is a location in the primary memory of your computer where you store values like string and numbers.

Strings are one of the values that you can store in a variable.

3. Describe three different data types.

Strings, Lists, Dictionaries

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

An expression is a combination of values, variables, operators, and calls to functions. Expressions need to be evaluated.

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

Statement represents an action or command. An expression is a combination of values, variabes, operators and calls to functions which yields a resulting value.

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

bacon = 22

bacon + 1

The variable bacon will still be 22 unless you specifically assign bacon = bacon + 1, in this case, bacon will be 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 names cannot start with a number or consist of only numbers.

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

int(value)

float(value)

str(value)

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

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

You cannot concatenate strings and integers together. In this case, 99 is an integer while ‘I have eaten’ and ‘burritos.’ are strings. We can fix this by adding quotes to 99 to get ‘99’.