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 (float)

- (expression)

/ (expression)

* (expression)

6 (int)

2. What is the difference between string and variable?

**String is the sequence of character which is inside a single quotes, double quote and triple quote, while variable is the one in which we assign a value int, float and string.**

3. Describe three different data types.

List: is collection of different datatype. The data in list are enclosed in []. List is ordered, mutable, it has dynamic characteristic. List elements can be accessed by index.

Tuple: its also a collection of different datatype. The data in tuple are enclosed in(). Tuple is immutable datatype.

Dictionary: it’s an orederd collection of key-pair datatype. We are enclosed dictionary in {}.

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

Expression is a statement of operands and operator.

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

An expression evaluates to a value i.e. spam+10. A statement does something e.g. spam=10.

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?

Because variable cannot be any numerical name it can be alpha numeric.

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.'

We cann’t concatenate string and int variable to fix this we should enclosed 99 to single quote: 'I have eaten ' + ‘99’ + ' burritos.'