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.

\*

'hello'

-87.8

-

/

6

Ans. Integer or String - ‘hello’, -87.8, 6

Operators - \*, /, -, +

2. What is the difference between string and variable?

Ans. A string is a collection of values and characters written inside double quotation (“ “) where a variable is a  character that can be used to store any type of data.

3. Describe three different data types.

Ans. String, Integer and List.

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

Ans. An expression is made up of some operation to produce some values. Operation can be mathematical, constant, or integral. Expression decides which operation will be performed first.

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

Ans. Expression is a piece of code which produces value.  
Spam = 10  
Expression: 10, Statement : spam = 10

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

bacon = 22

bacon + 1

Ans. 23

7. What should the values of the following two terms be?  
'spam' + 'spamspam'  
'spam' \* 3

Ans. ‘spamspamspam’

8. Why is eggs a valid variable name while 100 is invalid?  
Ans. Variable names do not start with a number. Variable names start with a letter or \_character or alphanumeric.

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

10. Why does this expression cause an error? How can you fix it?  
'I have eaten ' + 99 + ' burritos.'

Ans. 99 is an integer, possible concatenation is str() to str().  
We can use : 'I have eaten ' + '99' + ' burritos.'   
To fix it.