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: [ Values = 'hello', -87.8, 6]   
 [ Expressions = \*, / , +, - ]

2. What is the difference between string and variable?

Ans: String is a set of characters whereas a variable is a container which is used to store the values such an integer, character, string, float etc.

3. Describe three different data types.

Ans: The three different data types are

1. integer

2. float

3. string

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

Ans: The expression is a combination of operator and operands.   
  
 All expressions can be considered as a logical line of code that is evaluated to obtain some result. We can simply say it evaluates to a single value.

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

Ans: The expression is a combination of operator and operands that is evaluated to obtain some result. Whereas in simple words a statement is any unit of code which is executable and has an effect (excluding comments).

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

bacon = 22

bacon + 1

Ans: Here the variable bacon contains the same value 🡪 22. Because bacon + 1 has no effect to the variable, it should be bacon= bacon+1.

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

'spam' + 'spamspam'

'spam' \* 3  
Ans: 1. ‘spam’ + ‘spamspam’ 🡪 spamspamspam

2. ‘spam’ \* 3 🡪 spamspamspam

8. Why is eggs a valid variable name while 100 is invalid?  
Ans: The eggs is a valid variable because variable name can starts with

alphabet or \_

The 100 is an invalid variable because variable name does not starts with number

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

Ans: 1. int()

2. float()

3. str()

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

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

Ans: Because the string type and integer type cannot be concatenated together. We can fix that by converting int 99 into string

Eg:

‘I have eaten, + str(99) + ‘burritos’ (preferred)  
OR  
‘I have eaten, + ‘99’ + ‘burritos’