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 (String)

-87.8 = Value

- = Expression

/ = Expression

* = Expression

6 = Value

2. What is the difference between string and variable?

Ans.- A variable is a store of data/information, and string is a type of data that can be stored in a variable.

3. Describe three different data types.

String- sequence of characters

Boolean – True or False

Integer – any

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

Ans. An expression is a construct made up of variables, operators, and method invocations, which are constructed according to the syntax of the language, that evaluates to a single value.

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

Ans.- In programming language terminology, an “expression” is a combination of values and functions that are combined and interpreted by the compiler to create a new value, as opposed to a “statement” which is just a standalone unit of execution and doesn't return anything

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

bacon = 22 ## bacon will contain 22

bacon + 1 ## after execution bacon will still contain 22

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?

Ans.- Variable name can’t be begin with number. So ‘eggs’ is valid variable name but 100 is number, can’t be valid variable name.

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

Ans.- Int(), float() & str() can be used to get integer, floating point and string respectively.

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

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

Ans.- It will give “TypeError”. Sting can be concatenated with string only not with value.

We can remove this error by following: -

1. print(‘I have eaten’ + str(99) + ‘burritos’)
2. print(‘I have eaten’ + ‘99’ + ‘burritos’)
3. print(‘I have eaten’ , 99 , ‘burritos’)