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

Solution:

Values are ‘hello’, -87.8 , 6

Expression are \* , - ,/ , +

2. What is the difference between string and variable?

Solution:

String is a sequence of letters inside the quotes.

Variable is a name of location in the primary memory of computers.

3. Describe three different data types.

Solution:

Integer : By default the data type is a 32 bit ranging -2^31 to 2^31-1 basically it represents a numerical value.

Boolean: Data type has only two possible values true and false it is used to check conditions.

String: String is a sequence of letters inside the quotes.

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

Solution:

Expressions is made up of variable, operators and methods.

It yields a result value and return something.

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

Solution:

Expressions is made up of variable, operators and methods that are combined interpreted by the compiler to yields a result value and return something.

Where as statement is just a standalone unit of execution and does not return anything

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

bacon = 22

bacon + 1

Solution:

Bacon = 23

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

'spam' + 'spamspam'

'spam' \* 3

Solution:

The value of the above terms is

Spamspamspam

8. Why is eggs a valid variable name while 100 is invalid?

Solution: Python does not recognize 100 as a variable where as eggs is being recognized as a variable.

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

Solution:

For String : str()

For Integer : int()

For Float = float()

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

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

Solution:

This expression cause a Type Error

“Type Error: can only concatenate str (not "int") to str”

We can solve it by applying single quotes for 99 also to convert it to string value ‘99’

'I have eaten 99 burritos.'