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.

**Answer**:-

\* :-Expression

'hello' :- Value

-87.8 :- Value

- :-Expression

/ :-Expression

* :-Expression

6 :- Value

2. What is the difference between string and variable?

**Answer**:-

String is a type of information that can be stored in Variables and Strings always start and end with quotes.

Variable is like a box or container which holds values in it.

1. Describe three different data types.

**Answer**:-

Integer:- It consists of whole numbers. Ex:- 15,28

Float:- It consist of number with decimal point. Ex:- 3.142

Boolean:- It consist of Logical values. Ex:- True or False

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

**Answer**:-

Expression is made up of values,mathematical operators and variables. All expression will evaluate or produce some values .Ex X= 15 + 30.5

print(X)

output: 45.5

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

**Answer**:-

Expression is made up of values,mathematical operators and variables,Here spam = 10 is assignment statement where a value is assigned to “spam”.

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

bacon = 22

bacon + 1

**Answer**:-

After running the code variable bacon value will be 22 only.Because bacon + 1 expression does not reassign the value in bacon.

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

'spam' + 'spamspam'

'spam' \* 3

**Answer**:-

Both expressions evaluate to the string 'spamspamspam'

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

**Answer**:-

Because the variable name can’t be started with integer.

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

**Answer**:-

The int(), float(), and str() functions will evaluate to the integer, floating-point number, and string versions of the value passed to them.

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

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

**Answer**:-

It causes error because 99 is an integer, only string can be concatenated with other string.

To fix we need to use str()

'I have eaten ' + str(99) + ' burritos.'