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

**Answer:**

Values:

'hello' , 6 , -87.8

Expressions:

\* , - , / , +

2. What is the difference between string and variable?

**Answer:**

String is the method of representing characters as python doesn’t support them. To represent strings, we use single quote or double quote whereas in variable we store any kind of data like string, numbers, list etc.

For instance:

ab = “My name is Mohit”

In the above example **ab** is a variable and **“My name is Mohit”** is a string.

3. Describe three different data types.

**Answer:**

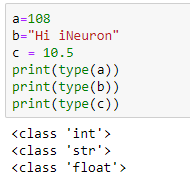
There are many data types to store data. From them three different data types are:

Integers: these are the data types where we can store numbers except rational, decimals and complex numbers.

Strings: these are the data type where we can store alphanumeric values in single quotes or double quotes.

Float: The data types where we can store decimal numbers or rational numbers.

For instance:



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

**Answer:**

Expressions are basically the different type of operators like +,-,\*,/or % etc. The help us to evaluate any 2 or more variables.

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

**Answer:**

**A statement refers to a piece of code that executes a specific instruction or tells the computer to complete a task** whereas **an expression usually refers to a piece of code that can be evaluated to a value,**and is composed of variables, operators.

**For instance :**

Assigning a value, a=10 (statement)

8-9\*2 (expression)

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

bacon = 22

bacon + 1

**Answer:**

23

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

'spam' + 'spamspam'

'spam' \* 3

**Answer:**

Both inputs are going to give same output **'spamspamspam'**

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

**Answer:**

Because when we are assigning 100 as a variable , we are assigning value to it. For instance if I write

100=2

I am trying to assign 100 as a 2 which is not correct where as if I assign eggs =100 , I am assigning value to a variable only.

9. 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 get the integer, floating-point number and string can be used.

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

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

**Answer:** we can’t combine integer and string together. To fix this we can use this expression.

'I have eaten ' + “99” + ' burritos.'