

## Understanding primitive data types in Python

There are some important data types to be considered during Python programming such as int, string, float, Boolean etc. String is just a combination of the characters. For example, "Shiva" is a string which contains 5 characters. If you want to count the number of characters in a given string then follow the below code:

```
name="Shiva"
```

```
print(len(name))
```

The output is:

```
In [1]: name="Shiva"
...: print(len(name))
5
```

In order to take out the particular character from a given string follow the below python code:

```
name="Shiva"
```

```
print(name[2])
```

The output is shown below:

```
In [2]: name="Shiva"
...: print(name[2])
i
```

The indexing of the character is shown below:

```
S h i v a
```

```
0 1 2 3 4
```

The content inside the "" are treated as a string. For example, "02" is not treated as a number, it is treated as a string. For the exercise part, perform the below coding:

```
print("567"+"789")
```

The output is shown below:

```
In [3]: print("567"+"789")
567789
```

So, it is observed that the + operator just joins or concatenate the two strings instead of doing the mathematical operations.

In order to perform the mathematical operations, our data type should be integer. For example, write the python code for adding up any two numbers. In this case I will take 2 and 11. So, the python code for adding up these two numbers is below:

```
print(2+11)
```

The output is shown below:

```
In [5]: print(2+11)  
13
```

Another way of coding the previous task is:

```
a=2
```

```
b=11
```

```
print(a+b)
```

The output will be same as 13.

Just keep in mind that the integer data type do not contain any decimal places. If the data type has a decimal place then the data type is known as a float and the number is known as a floating point number. For example, 2.0 is a float data type.

Other data type is Boolean which has two possible values i.e., True and False.