

8. NUMBERS

Number data types store numeric values. They are immutable data types, means that changing the value of a number data type results in a newly allocated object.

Number objects are created when you assign a value to them. For example:

```
var1 = 1  
var2 = 10
```

You can also delete the reference to a number object by using the **del** statement. The syntax of the **del** statement is:

```
del var1[,var2[,var3[....,varN]]]
```

You can delete a single object or multiple objects by using the **del** statement. For example:

```
del var  
del var_a, var_b
```

Python supports four different numerical types:

- **int (signed integers)**: They are often called just integers or ints, are positive or negative whole numbers with no decimal point.
- **long (long integers)**: Also called longs, they are integers of unlimited size, written like integers and followed by an uppercase or lowercase L.
- **float (floating point real values)** : Also called floats, they represent real numbers and are written with a decimal point dividing the integer and fractional parts. Floats may also be in scientific notation, with E or e indicating the power of 10 ($2.5e2 = 2.5 \times 10^2 = 250$).
- **complex (complex numbers)** : are of the form $a + bJ$, where a and b are floats and J (or j) represents the square root of -1 (which is an imaginary number). The real part of the number is a, and the imaginary part is b. Complex numbers are not used much in Python programming.