

# Numbers

Integers, floating point numbers and complex numbers falls under Python numbers category. They are defined as int, float and complex class in Python.

Number stores numeric values. Python creates Number objects when a number is assigned to a variable. Complex numbers are written with a "j" as the imaginary part. To verify the type of any object in Python, use the type() function.

Example	Output
a = 10 #integer type print(a) print(type(a))	10 <type 'int'> 20 <type 'int'>
a = 20 #integer type print(a) print(type(a))	10.12 <type 'float'> 10j <type 'complex'>
a = 10.12 #float type print(a) print(type(a))	
a= 10j #complex type print(a) print(type(a))	

# Number Type Conversion

Python has the capability and feature to convert within an expression containing the mixture of different types of values internally.

- Type **int(x)** to convert x to a plain integer.
- Type **long(x)** to convert x to a long integer.
- Type **float(x)** to convert x to a floating-point number.
- Type **complex(x)** to convert x to a complex number with real part x and imaginary part zero.
- Type **complex(x, y)** to convert x and y to a complex number with real part x and imaginary part y. x and y are numeric expressions

Example	Output
x = int(2.8) print(x) y = float(10) print(y) z = complex(20) print(z)	2 10.0 (20+0j)