**Python Numbers**

There are three numeric types in Python:

* int
* float
* complex

Variables of numeric types are created when you assign a value to them:

To verify the type of any object in Python, use the type() function:

## Int

Int, or integer, is a whole number, positive or negative, without decimals, of unlimited length.

## Float

Float, or "floating point number" is a number, positive or negative, containing one or more decimals.

Float can also be scientific numbers with an "e" to indicate the power of 10.

## Complex

Complex numbers are written with a "j" as the imaginary part:

## Type Conversion

You can convert from one type to another with the int(), float(), and complex() methods:

## Random Number

Python does not have a random() function to make a random number, but Python has a built-in module called random that can be used to make random numbers:

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**Python Casting**

Specify a Variable Type

There may be times when you want to specify a type on to a variable. This can be done with casting. Python is an object-orientated language, and as such it uses classes to define data types, including its primitive types.

Casting in python is therefore done using constructor functions:

* int() - constructs an integer number from an integer literal, a float literal (by removing all decimals), or a string literal (providing the string represents a whole number)
* float() - constructs a float number from an integer literal, a float literal or a string literal (providing the string represents a float or an integer)
* str() - constructs a string from a wide variety of data types, including strings, integer literals and float literals