complex()

complex() returns a complex number with the value real + imag*1j or converts a string or number to a complex number.

If the first parameter is a string, it will be interpreted as a complex number and the function must be called without a second parameter. The second parameter can never be a string. Each argument may be any numeric type (including complex). If imag is omitted, it defaults to zero and the constructor serves as a numeric conversion like int and float. If both arguments are omitted, returns 0j.

If you are doing math or engineering that requires complex numbers (such as dynamics, control systems, or impedance of a circuit) this is a useful tool to have in Python.

Let's see some examples:

In [1]:
```
# Create 2+3j
complex(2,3)
```

Out[1]:
```
(2+3j)
```

In [2]:
```
complex(10,1)
```

Out[2]:
```
(10+1j)
```

We can also pass strings:

In [3]:
```
complex('12+2j')
```

Out[3]:
```
(12+2j)
```

That's really all there is to this useful function. Keep it in mind if you are ever dealing with complex numbers in Python!