* Use [len()](https://docs.python.org/3/library/functions.html#len) to get the length of the list

**Help!**

Maybe you already know the name of a Python function, but you still have to figure out how to use it. Ironically, you have to ask for information about a function with another function: [help()](https://docs.python.org/3/library/functions.html#help). In IPython specifically, you can also use ? before the function name.

[complex()](https://docs.python.org/3/library/functions.html#complex) takes two arguments: real and imag. real is a required argument, imag is an optional argument.

**Multiple arguments**

In the previous exercise, the square brackets around imag in the documentation showed us that the imag argument is optional. But Python also uses a different way to tell users about arguments being optional.

Have a look at the documentation of [sorted()](https://docs.python.org/3/library/functions.html#sorted) by typing help(sorted) in the IPython Shell.

You'll see that [sorted()](https://docs.python.org/3/library/functions.html#sorted) takes three arguments: iterable, key and reverse.

key=None means that if you don't specify the key argument, it will be None. reverse=False means that if you don't specify the reverse argument, it will be False.

In this exercise, you'll only have to specify iterable and reverse, not key. The first input you pass to [sorted()](https://docs.python.org/3/library/functions.html#sorted) will be matched to the iterable argument, but what about the second input? To tell Python you want to specify reverse without changing anything about key, you can use =:

sorted(\_\_\_, reverse = \_\_\_)

# string to experiment with: place

place = "poolhouse"

# Use upper() on place: place\_up

place\_up =place.upper()

# Print out the number of o's in place

print(place.count('o'))

# List Methods

Strings are not the only Python types that have methods associated with them. Lists, floats, integers and booleans are also types that come packaged with a bunch of useful methods. In this exercise, you'll be experimenting with:

* [index()](https://docs.python.org/3/library/stdtypes.html#str.index), to get the index of the first element of a list that matches its input and
* [count()](https://docs.python.org/3/library/stdtypes.html#str.count), to get the number of times an element appears in a list.

# List Methods (2)

Most list methods will change the list they're called on. Examples are:

* [append()](https://docs.python.org/3/library/stdtypes.html#typesseq-mutable), that adds an element to the list it is called on,
* [remove()](https://docs.python.org/3/library/stdtypes.html#typesseq-mutable), that removes the first element of a list that matches the input, and
* [reverse()](https://docs.python.org/3/library/stdtypes.html#typesseq-mutable), that reverses the order of the elements in the list it is called on.

# Selective import

General imports, like import math, make **all** functionality from the math package available to you. However, if you decide to only use a specific part of a package, you can always make your import more selective:

from math import pi

To convert an angle in degrees to an angle in radians, use the [radians()](https://docs.python.org/3/library/math.html#math.radians) function