

# Built-in Python Functions Guide

Below you will find a table that includes the built-in functions and methods we have covered so far.

## Common and Useful Functions

These are some common functions you'll likely use frequently in your code.

Function	Description	Common Types	
		It Works On	Examples
<code>print()</code>	"Prints" the value to the screen (especially useful for strings)	Practically all Python types	<code>print(1)</code> <code>print('two', True)</code>
<code>display()</code>	Very similar to <code>print()</code> but used most often in Jupyter Notebook	Practically all Python types	<code>display(1)</code> <code>display('two', True)</code>
<code>help()</code>	Gives "help" and documentation on Python objects, including functions	Practically all Python types	<code>help(print)</code>
<code>type()</code>	Returns the Python type	Practically all Python types	<code>type(1)</code> <code>type(1.0)</code>
<code>str()</code>	Casts other Python objects to strings	Practically all Python types	<code>str(1)</code> <code>str(1.0)</code>
<code>int()</code>	Casts other Python objects to integers	Most types with some exceptions	<code>int('10')</code> <code>int(10.8675309)</code>
<code>float()</code>	Casts other Python objects to floating point numbers	Most types with some exceptions	<code>float('10')</code> <code>float(10)</code>
<code>bool()</code>	Casts other Python objects to either True or False	Practically all Python types	<code>bool('Hi')</code> <code>bool(0)</code>

<code>range()</code>	Returns a sequence of numbers starting from 0, incrementing by 1 by default	Integer types	<code>range(5)</code> <code>range(5, 100, 5)</code>
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## Type Specific Functions & Methods

Remember, functions and methods are very similar but methods use the “dot” notation.

Function or Method	Description	Common Types It Works On	Examples
<code>.upper()</code>	Method to capitalize all letters in string	Strings	<code>"What's that?".upper()</code> <code>"1 + 1 is two".upper()</code>
<code>.lower()</code>	Method to lowercase all letters in string	Strings	<code>"What's that?".upper()</code> <code>"1 + 1 Is TWO".upper()</code>
<code>.split()</code>	Method to break string up into elements in a list by some separator	Strings	<code>'1;1;2;3;5;7'.split(';')</code> <code>'How are you?'.split()</code>
<code>.join()</code>	Method to join elements in a list using some separator	Lists, Strings, Tuples	<code>' '.join(['Hello', 'world'])</code>
<code>len()</code>	Returns the size of the object	Strings, Lists	<code>len('expialidocious')</code> <code>len(['one', 'two', 'three'])</code>
<code>min()</code>	Returns the smallest value in a list	Lists (of comparable types)	<code>min([1, 2.01, 3])</code> <code>min(['a', 'b', 'c'])</code>
<code>max()</code>	Returns the largest value in a list	Lists (of comparable types)	<code>max([1, 2.01, 3])</code> <code>max(['a', 'b', 'c'])</code>

## Data Structure Functions & Methods

Lists and dictionaries have some useful functions and methods specific to them.

Function or Method	Description	Common Types It Works On	Examples
<code>sum()</code>	Adds all the values in a list together to get a total	List (of numerical values)	<code>sum([2, 4, 3, 1])</code>
<code>.append()</code>	Adds one new element to a list	Lists	<code>my_list.append('new')</code>
<code>.pop()</code>	Removes the element at the given index. Defaults to removing the last element	Lists	<code>my_list.pop()</code> <code>my_list.pop(2)</code>
<code>.keys()</code>	Gives all the "keys" from a dictionary	Dictionaries	<code>my_dictionary.keys()</code>
<code>.values()</code>	Gives all the "value" from a dictionary	Dictionaries	<code>my_dictionary.values()</code>
<code>.items()</code>	Gives all the "keys" and "values" as pairs from a dictionary	Dictionaries	<code>my_dictionary.items()</code>