Module	Description	Example	Script
core	dictionary, adding a new entry	co['po'] = 'CO'	g05/demo.py
core	dictionary, creating	$co = \{ \text{'name':'Colorado', 'capital':'Denver'} \}$	g05/demo.py
core	dictionary, looking up a value	name = ny['name']	g05/demo.py
core	dictionary, making a list of	list1 = [co, ny]	g05/demo.py
core	dictionary, obtaining a list of keys	names = super_dict.keys()	g05/demo.py
core	file, closing	fh.close()	g02/demo.py
core	file, opening for reading	fh = open('states.csv')	g05/demo.py
core	file, opening for writing	fh = open(filename, "w")	g02/demo.py
core	file, output using print	<pre>print("It was written during",year,file=fh)</pre>	g02/demo.py
core	file, output using write	fh.write("Where was this file was written?\n")	g02/demo.py
core	file, reading one line at a time	for line in fh:	g05/demo.py
core	for, looping through a list	for n in a_list:	g04/demo.py
core	list, appending an element	a_list.append("four")	g03/demo.py
core	list, create via comprehension	$cubes = [n**3 for n in a\_list]$	g04/demo.py
core	list, creating	$a\_list = ["zero", "one", "two", "three"]$	g03/demo.py
core	list, determining length	$n = len(b\_list)$	g03/demo.py
core	list, extending with another list	a_list.extend(a_more)	g03/demo.py
core	list, generating a sequence	$b\_list = range(1,6)$	g04/demo.py
core	list, joining with spaces	a_string = " ".join(a_list)	g03/demo.py
core	list, selecting an element	print(a_list[0])	g03/demo.py
core	list, selecting elements 0 to 3	<pre>print(a_list[:4])</pre>	g03/demo.py
core	list, selecting elements 1 to 2	<pre>print(a_list[1:3])</pre>	g03/demo.py
core	list, selecting elements 1 to the end	<pre>print(a_list[1:])</pre>	g03/demo.py
core	list, selecting last 3 elements	print(a_list[-3:])	g03/demo.py
core	list, selecting the last element	print(a_list[-1])	g03/demo.py
core	list, sorting	$c\_sort = sorted(b\_list)$	g03/demo.py
core	list, splitting on whitespace	$b_list = b_string.split()$	g03/demo.py
core	math, raising a number to a power	a_cubes.append( n**3 )	g04/demo.py
core	math, rounding a number	rounded = round(ratio, 2)	g05/demo.py
core	string, concatenating	name = $s1+"$ "+ $s2+"$ "+ $s3$	g02/demo.py
core	string, creating	filename = "demo.txt"	g02/demo.py
core	string, including a newline character	$fh.write(name + ``! \setminus n")$	g02/demo.py

Module	Description	Example	Script
core core	string, printing string, splitting on white space string, stripping blank space	<pre>print("Hello, World!") parts = line.split(',') clean = [item.strip() for item in parts]</pre>	g02/hello1.py g05/demo.py g05/demo.py
json json	importing the module using to print an object nicely	<pre>import json print( json.dumps(list1,indent=4) )</pre>	g05/demo.py g05/demo.py