Module	Description	Example	Script
core	continue, going on to next loop item	continue	g06/demo.py
core	dictionary, adding a new entry	co['po'] = 'CO'	g05/demo.py
core	dictionary, creating	$co = \{ 'name' : 'Colorado', 'capital' : 'Denver' \}$	g05/demo.py
core	dictionary, creating via comprehension	$word\_lengths = \{ w:len(w) for w in wordlist \}$	g06/demo.py
core	dictionary, iterating through key-value pairs	for w,l in word_lengths.items():	g06/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	function, calling	$d1\_ssq = sumsq(d1)$	g07/demo.py
core	function, defining	def sumsq(values: list) -> float:	g07/demo.py
core	function, returning a result	return values	g07/demo.py
core	function, using type hinting	def readlist(filename: str) -> list:	g07/demo.py
core	if, starting a conditional block	if I == 5:	g06/demo.py
core	if, using an elif statement	elif s.isalpha():	g06/demo.py
core	if, using an else statement	else:	g06/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	print(a_list[:4])	g03/demo.py

Module	Description	Example	Script
core	list, selecting elements 1 to 2	print(a_list[1:3])	g03/demo.py
core	list, selecting elements 1 to the end	print(a_list[1:])	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, summing	total = sum(numbers)	g06/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, convert to lower case	lower = [s.lower() for s in wordlist]	g06/demo.py
core	string, convert to title case	$new\_s = s.title()$	g06/demo.py
core	string, converting to an int	value = int(s)	g06/demo.py
core	string, converting to an int	values.append( int(line) )	g07/demo.py
core	string, creating	filename = "demo.txt"	g02/demo.py
core	string, finding starting index	$mm\_start = long\_string.find("mm")$	g06/demo.py
core	string, including a newline character	fh.write(name+"!\n")	g02/demo.py
core	string, is entirely numeric	if s.isnumeric():	g06/demo.py
core	string, matching a substring	$has\_\tilde{n} = [s \text{ for s in lower if "ñ" in s}]$	g06/demo.py
core	string, matching end	<pre>a_end = [s for s in lower if s.endswith("a")]</pre>	g06/demo.py
core	string, matching multiple starts	ab_start = [s for s in lower if s.startswith(starters)]	g06/demo.py
core	string, matching start	$a\_start = [s for s in lower if s.startswith("a")]$	g06/demo.py
core	string, replacing a substring	words = s.replace(",","").split()	g06/demo.py
core	string, splitting on a comma	parts = line.split(',')	g05/demo.py
core	string, splitting on whitespace	$b_{list} = b_{string.split}()$	g03/demo.py
core	string, stripping blank space	clean = [item.strip() for item in parts]	g05/demo.py
core	tuple, creating	starters = ("a", "b", "0")	g06/demo.py
json	importing the module	import json	g05/demo.py
json	using to print an object nicely	<pre>print( json.dumps(list1,indent=4) )</pre>	g05/demo.py