

>>> Lists in Python

Quick Reference

Function	Example	Output
Define a list.	<pre>1 list=[5,9,4,8,3,2,6,7] 2 print(list)</pre>	<pre>[5, 9, 4, 8, 3, 2, 6, 7]</pre>
Reference the element at a position in a list. Note: First element has position 0 (not 1).	<pre>1 list=[5,9,4,8,3,2,6,7] 2 x=list[3] 3 print(x)</pre>	<pre>8</pre>
Reference part of a list. Note: First element has position 0 (not 1).	<pre>1 list=[5,9,4,8,3,2,6,7] 2 x=list[2:5] 3 print(x)</pre>	<pre>[4, 8, 3]</pre>
Count the number of elements in a list (length).	<pre>1 list=[2,6,7,1,8,4,3] 2 x=len(list) 3 print(x)</pre>	<pre>7</pre>
Count the number of times an element appears in a list.	<pre>1 list=[2,9,4,5,3,4,6,4] 2 x=list.count(4) 3 print(x)</pre>	<pre>3</pre>
Determine the first occurrence of an element in a list.	<pre>1 list=[2,9,4,5,3,4,6,4] 2 x=list.index(4) 3 print(x)</pre>	<pre>2</pre>
Append an element to a list.	<pre>1 list=[5,2,3,4,7] 2 list.append(8) 3 print(list)</pre>	<pre>[5, 2, 3, 4, 7, 8]</pre>
Create a list using a formula (sequence).	<pre>1 squares=[x**2 for x in range(7)] 2 print(squares)</pre>	<pre>[0, 1, 4, 9, 16, 25, 36]</pre>
Shuffle the elements of a list. Note: Requires the random library.	<pre>1 import random 2 3 x=[1,2,3,4,5,6,7] 4 random.shuffle(x) 5 print(x)</pre>	<pre>[4, 1, 2, 5, 3, 7, 6]</pre>
Remove all the elements of a list.	<pre>1 list=[5,2,3,4,7] 2 list.clear() 3 print(list)</pre>	<pre>[]</pre>

Function	Example	Output
Determine the maximum value in a list.	<pre>1 list=[5,9,4,2,3,9,4,3,8] 2 x=max(list) 3 print(x)</pre>	<input type="text" value="9"/>
Determine the minimum value in a list.	<pre>1 list=[5,9,4,2,3,9,4,3,8] 2 x=min(list) 3 print(x)</pre>	<input type="text" value="2"/>
Calculate the sum of the values in a list.	<pre>1 list=[5,9,4,2,3,9,4,3,8] 2 x=sum(list) 3 print(x)</pre>	<input type="text" value="47"/>