

List operations

For the following examples, we assume that `l1` and `l2` are lists, `x`, `i`, `j`, `k`, `n` are integers.

`l1 = [10, 20, 30, 40, 50]` and `l2 = [60, 70, 80, 60]`

<code>x in l1</code>	Check if the list <code>l1</code> contains item <code>x</code> .
<code>x not in l2</code>	Check if list <code>l1</code> does not contain item <code>x</code> .
<code>l1 + l2</code>	Concatenate the lists <code>l1</code> and <code>l2</code> . Creates a new list containing the items from <code>l1</code> and <code>l2</code> .
<code>l1 * 5</code>	Repeat the list <code>l1</code> 5 times.
<code>l1[i]</code>	Get the item at index <code>i</code> . Example <code>l1[2]</code> is 30.
<code>l1[i:j]</code>	List slicing. Get the items from index <code>i</code> up to index <code>j</code> (excluding <code>j</code>) as a List. An example <code>l1[0:2]</code> is <code>[10, 20]</code>

<code>l1[i:j:k]</code>	List slicing with step. Returns a List with the items from index <code>i</code> up to index <code>j</code> taking every <code>k</code> -th item. An example <code>l1[0:4:2]</code> is <code>[10, 30]</code> .
<code>len(l1)</code>	Returns a count of total items in a list.
<code>l2.count(60)</code>	Returns the number of times a particular item (60) appears in a list. The answer is 2.
<code>l1.index(30)</code>	Returns the index number of a particular item (30) in a list. The answer is 2.
<code>l1.index(30, 2, 5)</code>	Returns the index number of a particular item (30) in a list. But search Returns the item with maximum value from a list. The answer is 60 only from index number 2 to 5.
<code>min(l1)</code>	Returns the item with a minimum value from a list. The answer is 10.
<code>max(l1)</code>	Returns the item with maximum value from a list. The answer is 60.

<code>l1.append(100)</code>	Add item at the end of the list
<code>l1.append([2, 5, 7])</code>	Append the nested list at the end
<code>l1[2] = 40</code>	Modify the item present at index 2
<code>l1.remove(40)</code>	Removes the first occurrence of item 40 from the list.
<code>pop(2)</code>	Removes and returns the item at index 2 from the list.
<code>l1.clear()</code>	Make list empty
<code>l3= l1.copy()</code>	Copy l1 into l2

OP → `l1 [10, 20, 30, 40, 50, [2, 5, 7]]`

↑ nested list

Tuple operations

For the following examples, we assume that `t1` and `t2` are tuples, `x, i, j, k, n` are integers.

`t1 = (10, 20, 30, 40, 50)` and `t2 = (60, 70, 80, 60)`

Operation	Description
<code>x in t1</code>	Check if the tuple <code>t1</code> contains the item <code>x</code> .

Operation	Description
<code>x not in t2</code>	Check if the tuple <code>t1</code> does not contain the item <code>x</code> .
<code>t1 + t2</code>	Concatenate the tuples <code>t1</code> and <code>t2</code> . Creates a new tuple containing the items from <code>t1</code> and <code>t2</code> .
<code>t1 * 5</code>	Repeat the tuple <code>t1</code> 5 times.
<code>t1[i]</code>	Get the item at the index <code>i</code> . Example, <code>t1[2]</code> is 30
<code>t1[i:j]</code>	Tuple slicing. Get the items from index <code>i</code> up to index <code>j</code> (excluding <code>j</code>) as a tuple. An example <code>t1[0:2]</code> is (10, 20)
<code>t1[i:j:k]</code>	Tuple slicing with step. Return a tuple with the items from index <code>i</code> up to index <code>j</code> taking every <code>k</code> -th item. An example <code>t1[0:4:2]</code> is (10, 30)
<code>len(t1)</code>	Returns a count of total items in a tuple
<code>t2.count(60)</code>	Returns the number of times a particular item (60) appears in a tuple. Answer is 2
<code>t1.index(30)</code>	Returns the index number of a particular item(30) in a tuple. Answer is 2

Operation	Description
<code>t1.index(40, 2, 5)</code>	Returns the index number of a particular item(30) in a tuple. But search only from index number 2 to 5.
<code>min(t1)</code>	Returns the item with a minimum value from a tuple
<code>max(t1)</code>	Returns the item with maximum value from a tuple