## **List Methods**

append()	Adds an element at the end of the list		
clear()	Removes all the elements from the list		
copy()	Returns a copy of the list		
count()	Returns the number of elements with the specified value		
extend()	Add the elements of a list (or any iterable), to the end of the current list		
index()	Returns the index of the first element with the specified value		
insert()	Adds an element at the specified position		
pop()	Removes the element at the specified position		
remove()	Removes the item with the specified value		
reverse()	Reverses the order of the list		
sort()	Sorts the list		

## **Tuple Methods**

count()	Returns the number of times a specified value occurs in a tuple
index()	Searches the tuple for a specified value and returns the position of
	where it was found

## **Set Methods**

add()	Adds an element to the set		
clear()	Removes all the elements from the set		
copy()	Returns a copy of the set		
difference()	Returns a set containing the difference between		
	two or more sets		
difference_update()	Removes the items in this set that are also		
	included in another, specified set		
discard()	Remove the specified item		

intersection()	Returns a set, that is the intersection of two		
	other sets		
intersection_update()	Removes the items in this set that are not		
	present in other, specified set(s)		
isdisjoint()	Returns whether two sets have a intersection or		
	not		
issubset()	Returns whether another set contains this set or		
	not		
issuperset()	Returns whether this set contains another set or		
	not		
pop()	Removes an element from the set		
remove()	Removes the specified element		
symmetric_difference()	Returns a set with the symmetric differences of		
	two sets		
symmetric_difference_update()	inserts the symmetric differences from this set		
	and another		
union()	Return a set containing the union of sets		
update()	Update the set with the union of this set and		
	others		

Operation	Mathematical Notation	Python Syntax	Result Type	Meaning
Union	$A \cup B$	A   B	set	Elements in A or B or both
Intersection	$A \cap B$	A & B	set	Elements common to both A and B
Set Difference	A - B	A - B	set	Elements in A but not in B
Symmetric Difference	$A \oplus B$	A ^ B	set	Elements in A or B, but not both
Set Membership	$x \in A$	x in A	bool	x is a member of A
Set Membership	$x \notin A$	x not in A	bool	x is not a member of A
Set Equality	A = B	A == B	bool	Sets A and B contain exactly the
				same elements
Subset	$A \subseteq B$	A <= B	bool	Every element in set A also is a
				member of set B
Proper Subset	$A \subset B$	A < B	bool	A is a subset B, but B contains at
				least one element not in A

## **Dictionary Methods**

clear()	Removes all the elements from the dictionary			
copy()	Returns a copy of the dictionary			
fromkeys()	Returns a dictionary with the specified keys and value			
get()	Returns the value of the specified key			
items()	Returns a list containing a tuple for each key value			
	pair			
keys()	Returns a list containing the dictionary's keys			
pop()	Removes the element with the specified key			
popitem()	Removes the last inserted key-value pair			
setdefault()	Returns the value of the specified key. If the key does			
	not exist: insert the key, with the specified value			
update()	Updates the dictionary with the specified key-value			
	pairs			
values()	Returns a list of all the values in the dictionary-			