Python List Function

The list is a most versatile datatype available in Python which can be written as a list of comma-separated values (items) between square brackets

 Python lists are mutable type its mean we can modify its element after it created.

Ex.

```
list1 = ['physics', 'chemistry', 1997, 2000];
list2 = [1, 2, 3, 4, 5 ];
list3 = ["a", "b", "c", "d"]
```

Delete List Elements

```
list1 = ['physics', 'chemistry', 1997, 2000];
print list1
del list1[2];
print "After deleting value at index 2 : "
print list1
```

Basic List Operation

Python Expression	Results	Description
len([1, 2, 3])	3	Length
[1, 2, 3] + [4, 5, 6]	[1, 2, 3, 4, 5, 6]	Concatenation
['Hi!'] * 4	['Hi!', 'Hi!', 'Hi!', 'Hi!']	Repetition
3 in [1, 2, 3]	True	Membership
for x in [1, 2, 3]: print x,	1 2 3	Iteration

Built-in List Functions & Methods

Python includes the following list functions −

Sr.No.	Function with Description
1	cmp(list1, list2) Compares elements of both lists.
2	len(list) Gives the total length of the list.
3	max(list) Returns item from the list with max value.
4	min(list) Returns item from the list with min value.
5	list(seq) Converts a tuple into list.

Sr.No.	Methods with Description
1	list.append(obj) Appends object obj to list
2	list.count(obj) Returns count of how many times obj occurs in list
3	list.extend(seq)

		Appends the contents of seq to list
4	list.index(obj)	Returns the lowest index in list that obj appears
5	list.insert(index, obj)	Inserts object obj into list at offset index
6	list.pop(obj=list[-1])	Removes and returns last object or obj from list
7	list.remove(obj)	Removes object obj from list
8	list.reverse()	Reverses objects of list in place
9	list.sort([func])	Sorts objects of list, use compare func if given