

## Append function

```
In [13]: list1 =[1,2,3,4]
list1.append("Hi")
list1
```

```
Out[13]: [1, 2, 3, 4, 'Hi']
```

Here we have created list list1 with elements 1,2,3,4. we have appended "hi" to it.so length of list1 becomes 5.

```
In [7]: len(list1)
```

```
Out[7]: 5
```

Now we have created list2 with 4 elements in it and we have appended list2 with list1. so Length of list1 becomes 6.

```
In [2]: list2 =["how", "are", "you", "?"]
list2
```

```
Out[2]: ['how', 'are', 'you', '?']
```

```
In [8]: list1.append(list2)
```

```
In [9]: list1
```

```
Out[9]: [1, 2, 3, 4, 'Hi', ['how', 'are', 'you', '?']]
```

```
In [11]: len(list1)
```

```
Out[11]: 6
```

This shows that append function adds the element to the end of the list and increases its length by 1.

## Extend Function

```
In [22]: A=[1,2,3,4,5]
```

```
In [23]: len(A)
```

```
Out[23]: 5
```

```
In [17]: A.extend([6,7,8,9,10])
```

```
In [18]: A
```

```
Out[18]: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
```

```
In [19]: len(A)
```

```
Out[19]: 10
```

Here we have created list A with elements 1,2,3,4,5 and we have extended the list by adding 6,7,8,9,10. So length of list has changed from 5 to 10.