

## List method in python

- Python contains the following list methods.

### 1.append()

- It is used to add the new element at the end of the list.

```
fruit_list=["Apple","Orange","Mango"]
print("Fruits list :",fruit_list)
#this line will add Cherry at the end of list
fruit_list.append("Cherry")
print("New Fruits list :",fruit_list)
"""
***Output***
Fruits list : ['Apple', 'Orange', 'Mango']
New Fruits list : ['Apple', 'Orange', 'Mango', 'Cherry']
"""
```

### 2.clear()

- This function is used to empty the list.

```
fruit_list=["Apple","Orange","Mango"]
print("Fruits list :",fruit_list)
#this line will empty the list
fruit_list.clear()
print("New Fruits list :",fruit_list)
"""
***Output***
Fruits list : ['Apple', 'Orange', 'Mango']
New Fruits list : []
"""
```

### 3.count()

- This method counts the number of occurrence of particular item in a list.

```
number_list=[10,16,40,50,60,40,16,30,16,10,50]
print("Numbers list :",number_list)
print("Total Count of 16 :",number_list.count(16))
"""
***Output***
Numbers list : [10, 16, 40, 50, 60, 40, 16, 30, 16, 10, 50]
Total Count of 16 : 3
"""
```

#### 4. copy()

- This function copies the elements of one list into another.

```
list1=["Apple","Orange","Mango"]
print("List1 items:",list1)
#this line will copy list1 items into list2
list2=list1.copy()
print("List2 items:",list2)
"""
```

\*\*\*Output\*\*\*

```
List1 items: ['Apple', 'Orange', 'Mango']
List2 items: ['Apple', 'Orange', 'Mango']
"""
```

#### 5. extend()

- This function is used to join two list.

```
list1=["Apple","Orange","Mango"]
list2=["Cherry","Grapes","Melon"]
#this line will join list1 and list2
list1.extend(list2)
print("list1 items")
print(list1)
"""
```

\*\*\*Output\*\*\*

```
list1 items
['Apple', 'Orange', 'Mango', 'Cherry', 'Grapes', 'Melon']
"""
```

#### 6. index()

- It returns the lowest index of given element.

```
number_list=[10,30,16,50,60,40,16,30,16,10,50]
print("Index of 16 :",number_list.index(16))
"""
```

\*\*\*Output\*\*\*

```
Index of 16 : 2
Note:16 is present at index 2 , 6 and 8
"""
```

#### 7. insert()

- insert() function is used to add new items into list at particular index.

```
fruit_list=["Apple","Orange","Mango"]
print("Before insertion")
print(fruit_list)
#this line will add Banana at index 1
fruit_list.insert(1,"Banana")
print("After insertion")
print(fruit_list)
"""
```

**\*\*\*Output\*\*\***

Before insertion

```
['Apple', 'Orange', 'Mango']
```

After insertion

```
['Apple', 'Banana', 'Orange', 'Mango']
```

"""

**8.pop()**

- This function deletes the element of given index.
- It deletes last item if we do not pass index

```
fruit_list=["Apple","Orange","Mango","Cherry"]
```

```
print("Fruits list :",fruit_list)
```

```
#this line will delete last element Cherry
```

```
fruit_list.pop()
```

```
print("Fruits list :",fruit_list)
```

```
#this line will delete element at index 1(Orange)
```

```
fruit_list.pop(1)
```

```
print("Fruits list :",fruit_list)
```

"""

**\*\*\*Output\*\*\***

```
Fruits list : ['Apple', 'Orange', 'Mango', 'Cherry']
```

```
Fruits list : ['Apple', 'Orange', 'Mango']
```

```
Fruits list : ['Apple', 'Mango']
```

"""

**9.remove()**

- remove() function is used to delete or remove item from list.

```
fruit_list=["Apple","Orange","Mango"]
```

```
print("Before deletion")
```

```
print(fruit_list)
```

```
#this line will delete Orange from list
```

```
fruit_list.remove("Orange")
```

```
print("After deletion")
```

```
print(fruit_list)
```

"""

**\*\*\*Output\*\*\***

Before deletion

```
['Apple', 'Orange', 'Mango']
```

After deletion

```
['Apple', 'Mango']
```

"""

## 10.reverse()

- This function reverses elements of the list.

```
fruit_list=["Apple","Orange","Mango","Cherry"]
print("Fruits list :",fruit_list)
#this line will reverse the list items
fruit_list.reverse()
print("Reverse Fruits list :",fruit_list)
"""
```

\*\*\*Output\*\*\*

```
Fruits list : ['Apple', 'Orange', 'Mango', 'Cherry']
Reverse Fruits list : ['Cherry', 'Mango', 'Orange', 'Apple']
"""
```

## 11.sort()

- This function Sorts the list.
- By using this function we can display the list items in ascending order or descending order.

### #Example 1:Ascending order

```
str_list=["Apple","Orange","Mango","Cherry"]
int_list=[58,20,46,36]
char_list=['E','A','S','Y']
print("List item before sorting")
print(str_list)
print(int_list)
print(char_list)
#Sort the lists in ascending order
str_list.sort()
int_list.sort()
char_list.sort()
print("List item after sorting")
print(str_list)
print(int_list)
print(char_list)
"""
```

\*\*\*Output\*\*\*

```
List item before sorting
['Apple', 'Orange', 'Mango', 'Cherry']
[58, 20, 46, 36]
['E', 'A', 'S', 'Y']
List item after sorting
['Apple', 'Cherry', 'Mango', 'Orange']
[20, 36, 46, 58]
['A', 'E', 'S', 'Y']
"""
```

**#Example 2:Descending order**

```
str_list=["Apple","Orange","Mango","Cherry"]
int_list=[58,20,46,36]
char_list=['E','A','S','Y']
print("List item before sorting")
print(str_list)
print(int_list)
print(char_list)
#Sort the lists in descending order
str_list.sort(reverse=True)
int_list.sort(reverse=True)
char_list.sort(reverse=True)
print("List item after sorting descending order")
print(str_list)
print(int_list)
print(char_list)
"""
```

**\*\*\*Output\*\*\***

```
List item before sorting
['Apple', 'Orange', 'Mango', 'Cherry']
[58, 20, 46, 36]
['E', 'A', 'S', 'Y']
List item after sorting descending order
['Orange', 'Mango', 'Cherry', 'Apple']
[58, 46, 36, 20]
['Y', 'S', 'E', 'A']
"""
```