List Methods

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

- **append():-** Adds an element at the end of the list

```
fruits = ["apple", "banana", "cherry"]
fruits.append("orange")
print(fruits)

Output:- ['apple', 'banana', 'cherry', 'orange']

# Example2:-
a = ["apple", "banana", "cherry"]
b = ["Ford", "BMW", "Volvo"]
a.append(b)
print(a)

Output:- ['apple', 'banana', 'cherry', ["Ford", "BMW", "Volvo"]]
```

- **extend():-** Add the elements of a list (or any iterable), to the end of the current list

```
fruits = ['apple', 'banana', 'cherry']
cars = ['Ford', 'BMW', 'Volvo']
fruits.extend(cars)
print(fruits)

output:- ['apple', 'banana', 'cherry', 'Ford', 'BMW', 'Volvo']
```

- **insert():-** Adds an element at the specified position

```
fruits = ['apple', 'banana', 'cherry']
fruits.insert(1, "orange")
print(fruits)

Output:- ['apple', 'orange', 'banana', 'cherry']
```

- **copy():-** Returns a copy of the list

```
fruits = ["apple", "banana", "cherry"]
x = fruits.copy()
print(x)

Output:- ['apple', 'banana', 'cherry']
```

- **count():-** Returns the number of elements with the specified value

```
fruits = [1, 4, 2, 9, 7, 8, 9, 3, 1]
x = fruits.count(9)
print(x)

Output:- 2
```

- **index():-** Returns the index of the first element with the specified value

```
fruits = [4, 55, 64, 32, 16, 32]
x = fruits.index(32)
print(x)

Output:- 3
```

- **pop():-** Removes the element at the specified position
- if you do not specify the index, the **pop()** method removes the last item.

```
fruits = ['apple', 'banana', 'cherry']
x = fruits.pop(1)
print(x)
print(fruits)

output:-
banana
['apple', 'cherry']
```

- **remove():-** Removes the item with the specified value

```
fruits = ['apple', 'banana', 'cherry']
fruits.remove("banana")
print(fruits)

Output:- ['apple', 'cherry']
```

- **clear():-** Removes all the elements from the list

```
fruits = ["apple", "banana", "cherry"]
fruits.clear()
print(fruits)

Output:- []
```

- **reverse():-** Reverses the order of the list

```
fruits = ['apple', 'banana', 'cherry']
fruits.reverse()
print(fruits)

Output:- ['cherry', 'banana', 'apple']
```

- **sort():-** Sorts the list

```
cars = ['Ford', 'BMW', 'Volvo']
cars.sort()
print(cars)

Output:- ['BMW', 'Ford', 'Volvo']

# Parameter Values in sort()
 1. reverse:- optional. reverse=True will sort the list descending. Default is
reverse=False
 2. key Optional. A function to specify the sorting criteria(s)

Example:-
cars = ['Ford', 'BMW', 'Volvo']
cars.sort(reverse=True)
print(cars)

Output:- ['Volvo', 'Ford', 'BMW']

Example2:-
```

```
def myFunc(e):
  return len(e)

cars = ['Ford', 'Mitsubishi', 'BMW', 'VW']
cars.sort(key=myFunc)
print(cars)

Output:- ['VW', 'BMW', 'Ford', 'Mitsubishi']

Example3:-
def myFunc(e):
  return len(e)

cars = ['Ford', 'Mitsubishi', 'BMW', 'VW']
cars.sort(reverse=True, key=myFunc)
print(cars)

Output:- ['Mitsubishi', 'Ford'', 'BMW', 'VW']

Example4:-
def myFunc(e):
  return e['year']

cars = [
  {'car': 'Ford', 'year': 2005},
  {'car': 'Mitsubishi', 'year': 2000},
  {'car': 'BMW', 'year': 2019},
  {'car': 'VW', 'year': 2011}
]

cars.sort(key=myFunc)

print(cars)

Output:-
[{'car': 'Mitsubishi', 'year': 2000}, {'car': 'Ford', 'year': 2005}, {'car': 'VW',
'year': 2011}, {'car': 'BMW', 'year': 2019}]
```