LISTS

The list is a mutable sequence type. A list object contains one or more items of different data types in the ~~see~~ square brackets [] separated by a comma. Lists are used to store multiple values. Lists are one of 4 built-in data types in Python used to ~~to~~ store collections of data.

e.g →

```
fruits = ["banana", "apple", "orange"]
print(fruits)
print(Fruits[1:2])
```

O/T

```
['apple']
```

print (fruits[-1]) → orange

print (fruits[1:]) → ['~~banana~~', 'apple', 'orange']

e.g →

```
furits = ['apple', 'banana', 'mango', 'kiwi', 'pineapple']
Fruits[2:4] = ["watermelon", "green apple"]
Print(fruits)
```

O/T

~~banana, apple,~~

['apple', 'banana', 'watermelon', 'green apple', 'pineapple']

Fruits[2:]

O/U

['watermelon', 'green apple', 'pineapple']

1) Fruits = ['apple', 'banana', 'orange']
Fruits[1:2] = ['kiwi']
print ("Fruits")

Output

['apple', 'kiwi']

2) insert()

Fruits = ["apple", "banana", "cherry"]
Fruits.insert(1, "orange")
print (Fruits)

O/U

['apple', 'orange', 'banana', 'cherry']

append()

add an item.

Fruits = ["watermelon", "green apple"]
Fruits.append("orange")
print (Fruits)

Output

['watermelon', 'green apple', 'orange']

extend()

Fruits = ["watermelon", "green apple"]
fruits2 = ["mango", "pineapple"]
Fruits.extend (fruits2)
print (Fruits)

Output

['watermelon', 'green apple', 'mango', 'pineapple']

Remove()

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

O/P

['banana', 'cherry']

pop()

```
Fruits = ["apple", "banana", "cherry"]
fruits.pop(1)
print(Fruits)
```

O/P

['banana', 'cherry']

del()

```
Fruits = ["apple", "banana", "cherry"]
del Fruits[1]
print(Fruits)
```

O/P

['banana', 'cherry']

(*) del() function can be used to delete the whole list

```
Fruits = ["apple", "banana", "cherry"]
del Fruits
```

clear()

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

Output

[]

clear() function, we can clear the list with this function, without deleting the list that is list will be there, but has no content

copy()

```
Fruits = ['apple', 'banana', 'orange']
myFruits = Fruits.copy()
print(myFruits)
```

O/P

```
['apple', 'banana', 'orange']
```

Method	Description
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 element 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()	Add an element at the specified position.
pop()	Remove 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.