**LIST METHODS IN PYTHON**

**DEFINITION OF THE LIST:**

A list is a data structure in Python that is a mutable, or changeable, ordered sequence of elements. Each element or value that is inside of a list is called an item. Just as strings are defined as characters between quotes, lists are defined by having values between square brackets [ ] .

**While all methods are functions in Python, not all functions are methods. There is a key difference between functions and methods in Python. Functions take objects as inputs. Methods in contrast act on objects.**

**In this list methods are given below:**

1.append()

2.copy()

3.clear()

4.count()

5.extend()

6.index()

7.insert()

8.pop()

9.remove()

10.reverse()

11.sort()

12.min()

13.max()

Each method can be explained given below:

1).append()

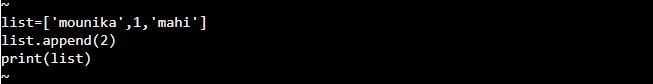
In this method is used to add elements to the last position of the list.

**Syntax:**list.append(element)

Example program:

output:

Input:



Output:



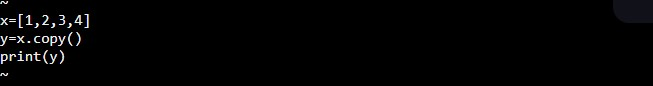
2).copy()

The copy() method returns new list.It dees not modify the original list.

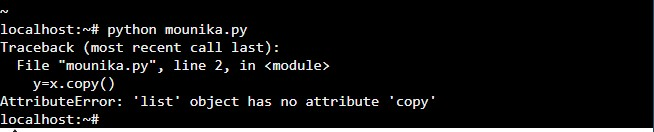
**Syntax:**new\_list=list.copy()

Example program:

Input:



Output:



3).clear()

This method is used for removing all items from the list.

**Syntax:**list\_name.clear()

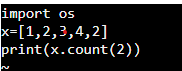
Example program:it is not run the linux terminal.

4).count()

It Returns the number of elements with the specified value.

Syntax:list.count(element)

Example program:



Output:

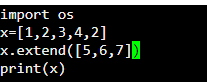


5).extend():

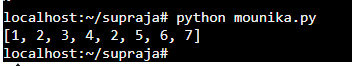
Adding the morethan one number of elements to the end of the list.

Syntax:list1.extend(list2)

Example program:



Output:

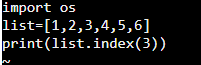


6).index()

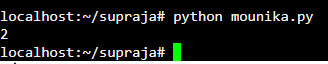
It returns the index of the first occurance.The start and end indexes are not necessary parameters.

Syntax:list.index(element[,start[end]])

Example program:



Output:



7).insert()

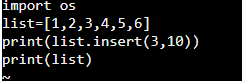
The insert() method inserts the specified value at the specified position.

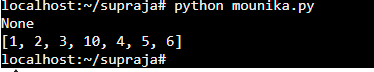
(or)

Adds an element at the specified position.

Syntax:list.insert(position,element)

Example program:



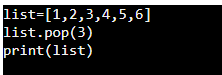


8).pop()

The pop() method removes the element at the specified position.

Syntax:list.pop(index)

Example program:



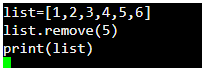


9).remove()

The remove() method removes the first occurance of the element with the specified value.

Syntax:list.remove(element)

Example program:



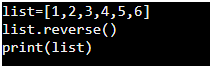


10)reverse()

The reverse() method reverses the current sorting order of the elements.

Syntax:list.reverse()

Example program:



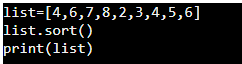


11)sort()

Sort a list in ascending,descending,or user defined order.

Syntax:list\_name.sort(reverse=…, key=… )

Example program:



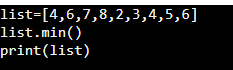


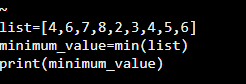
12)min()

The min() function is used to find the smallest element in the list.

Syntax:min(list)

Example program:



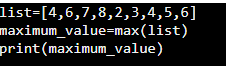


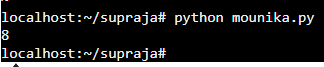
13)max()

The max() function is used to find the highest value in the list.

Syntax:max()

Example program:





**TUPLE METHODS**

**Tuple definition:**

**Tuple is an immutable ordered collection of items in python.Being immutable means once a tuple is created,it cannot be modified.**

**Tuple contains two methods they are:**

**1.count()**

**2.index()**

**1.count()**

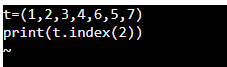
**It returns the number of times a specified value occurs in a tuple.**

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**2.index()**

**Searches the tuple for a specified value and returns the position of where it was found.**

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