

<b>Ex.No: 4a</b> <b>Date:</b>	<b>OPERATIONS OF LIST</b>
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**AIM:**

To write a python program to evaluate the operations of list.

**ALGORITHM:**

1. Start the program.
2. Declare the list of items in library.
3. Prints first and fourth element in list.
4. Prints list elements from 0<sup>th</sup> index to 4<sup>th</sup> index.
5. Prints -7<sup>th</sup> or 3<sup>rd</sup> element from the list.
6. Appending an element from the list using append() function.
7. Finding index of the specified element.
8. Sorting the elements in list.
9. Popping an element using pop() function.
10. Removing the specified element in the list.
11. Inserting an element at specified index.
12. Displays all the elements in the list.
13. Stop the program.

## **Program:**

```
library=['Books','Periodicals','Newspaper','Manuscripts','Maps','Prints',
'Documents','Ebooks']
print('Library: ',library) print('first
element:          ',library[0])
print('fourth element:      ',library[3])
print('Items in library from 0 to 4 index: ',library[0:5])
print('3rd or -7th element: ',library[-7]) print('Library list
after append(): ',library)
print('Index of \'newspaper\':          ',library.index('newspaper'))
library.sort()
print('after sorting:   ',library);
print('popped element is:
      ',library.pop())
print('after pop(): ',library)
library.remove('maps')
print('after removing \'maps\':      ',library)
library.insert(2,'CDs')
print('after insert:      ',library)
print('Number of elements in Library list:      ',library.count('Ebooks'))
```

## **OUTPUT:**

```
Library:  ['Books', 'Periodicals', 'Newspaper', 'Manuscripts', 'Maps', 'Prints', 'Documents',
'Ebooks'] first element:  Books

fourth element:          Manuscripts

Items in library from 0 to 4 index:      ['Books', 'Periodicals', 'Newspaper', 'Manuscripts', 'Maps']

3rd  or -7th element:  Periodicals

Library list after append():      ['Books', 'Periodicals', 'Newspaper', 'Manuscripts', 'Maps', 'Prints',
'Documents', 'Ebooks']
```

**RESULT:**

Thus the program to evaluate the operations of list is executed.