

**Aim:**

Write a python program to Create a list and perform the following methods 1) insert() 2) remove() 3) append() 4) len() 5) pop() 6)clear()

**Source Code:**listop.py

```
n=input("Enter Elements Separated by ,(Comma) : ")
thislist=n.split(",")
n=int(input("Enter Position to Insert element : "))
num=input("Enter Element to Insert : ")
thislist.insert(n,num)
if num in thislist:
    print("Element inserted to the list")
print("Before Removing Element List : ",thislist)
rem=input("Enter Element to Remove : ")
flag=0
for i in thislist:
    if(rem==i):
        thislist.remove(rem)
        flag=1
        break
if(flag==1):
    print("Element Removed from list")
else:
    print("Element not Exist")
print("After Removing Element List : ",thislist)
add=input("Enter element to add : ")
thislist.append(add)
if add in thislist:
    print("Element added to the list")
print("After Adding Element List : ",thislist)
print("List length : ",len(thislist))
ind=int(input("Enter Element index to Remove : "))
le=len(thislist)
if(le<=ind):
    print("Index not Exist")
else:
    thislist.pop(ind)
    print("Element Removed from list")
print("Before Clearing the Elements list : ",thislist)
thislist.clear()
print("After Clearing the Elements list : ",thislist)
```

## Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter Elements Separated by ,(Comma) : 1,2,3,4
Enter Position to Insert element : 4
Enter Element to Insert : 5
Element inserted to the list 3
Before Removing Element List : ['1', '2', '3', '4', '5'] 3
Enter Element to Remove : 3
Element Removed from list 3
After Removing Element List : ['1', '2', '4', '5'] 3
Enter element to add : 3
Element added to the list 2
After Adding Element List : ['1', '2', '4', '5', '3'] 2
List length : 5 2
Enter Element index to Remove : 2
Element Removed from list
Before Clearing the Elements list : ['1', '2', '5', '3']
After Clearing the Elements list : []

Test Case - 2
User Output
Enter Elements Separated by ,(Comma) : 10,23,34,45
Enter Position to Insert element : 2
Enter Element to Insert : 56
Element inserted to the list 43
Before Removing Element List : ['10', '23', '56', '34', '45'] 43
Enter Element to Remove : 43
Element not Exist 10
After Removing Element List : ['10', '23', '56', '34', '45'] 10
Enter element to add : 10
Element added to the list 99
After Adding Element List : ['10', '23', '56', '34', '45', '10'] 99
List length : 6 99
Enter Element index to Remove : 99
Index not Exist
Before Clearing the Elements list : ['10', '23', '56', '34', '45', '10']
After Clearing the Elements list : []