**EXP :2**

mylist=[10,40,50,20,30,10,40,10]

yourlist=['saw','small','foxes','he','six']

#Append integer 60 into myList

mylist.append(60)

print(mylist)

print("\n")

#Insert 70 on 2nd position

mylist.insert(1,70)

print(mylist)

print("\n")

#Sort myList in ascending and descending order

mylist.sort()

print(mylist)

print("\n")

mylist.sort(reverse=True)

print(mylist)

print("\n")

#Sort yourList in ascending and descending according to length of strings

for x in range(len(mylist)):

        print(mylist[x])

print(range(len(mylist)))

yourlist.sort(reverse=True)

print(yourlist)

print("\n")

 #Add float value 3.5 into yourList.

mylist.append(3.5)

print(mylist)

print("\n")

#Use POP and remove method to remove 3.5

mylist.pop()

print(mylist)

print("\n")

#Create ourList by merging myList and yourList.

ourlist=mylist + yourlist

print(ourlist)

print("\n")

#Find sum of elements in myList

i=0

sum=0

while i<len(mylist):

    sum=sum+mylist[i]

    i=i+1

print(sum)

#Find smallest, largest and second largest number in a myList.

mylist.sort()

print(mylist[0])

l=len(mylist)

print(mylist[l-1])

print(mylist[l-2])

#Count occurrences of all element in a list

print("occurance of element " , l  )

#Perform Data slicing to display string elements from ascending sorted yourList as:-

#a. Display-‘saw’,’six’,’small’

yourlist.sort()

sliced\_list = yourlist[2:5]

print(sliced\_list)

#b. Use negative indices to display – 'saw',‘six’, ‘small’

yourlist.sort()

sliced\_list = yourlist[-3:]

print(sliced\_list)

#c. All elements after mid of the list (In both directions)

#Alternate elements in both direction middle of list.

yourlist.sort()

mid = len(yourlist) // 2

elements\_after\_mid = yourlist[mid:]

print("All elements after mid:", elements\_after\_mid)

alternate\_elements = yourlist[mid::2]

print("Alternate elements from middle:", alternate\_elements)

Output :

[10, 40, 50, 20, 30, 10, 40, 10, 60]

[10, 70, 40, 50, 20, 30, 10, 40, 10, 60]

[10, 10, 10, 20, 30, 40, 40, 50, 60, 70]

[70, 60, 50, 40, 40, 30, 20, 10, 10, 10]

70

60

50

40

40

30

20

10

10

10

range(0, 10)

['small', 'six', 'saw', 'he', 'foxes']

[70, 60, 50, 40, 40, 30, 20, 10, 10, 10, 3.5]

[70, 60, 50, 40, 40, 30, 20, 10, 10, 10]

[70, 60, 50, 40, 40, 30, 20, 10, 10, 10, 'small', 'six', 'saw', 'he', 'foxes']

340

10

70

60

occurance of element 10

['saw', 'six', 'small']

['saw', 'six', 'small']

All elements after mid: ['saw', 'six', 'small']

Alternate elements from middle: ['saw', 'small']