

```
lab assignments = 3

M nadeem(FA20-BSE-035)
```

```
#### create two lists based on the user values merge both the lists and display in sorted order.
```

```
#create the first list
list1 = []
n = int(input("Enter the number of elements in list 1: "))
for i in range(n):
    elem = int(input("Enter element " + str(i+1) + ": "))
    list1.append(elem)

# create the second list
list2 = []
m = int(input("Enter the number of elements in list 2: "))
for i in range(m):
    elem = int(input("Enter element " + str(i+1) + ": "))
    list2.append(elem)

# merge the two lists
merged_list = list1 + list2

# sort the merged list
sorted_list = sorted(merged_list)

# display the sorted list
print("Merged and sorted list:", sorted_list)

Enter the number of elements in list 1: 2
Enter element 1: 7
Enter element 2: 6
Enter the number of elements in list 2: 9
Enter element 1: 1
Enter element 2: 3
Enter element 3: 7
Enter element 4: 8
Enter element 5: 3
Enter element 6: 5
Enter element 7: 7
Enter element 8: 10
Enter element 9: 11
Merged and sorted list: [1, 3, 3, 5, 6, 7, 7, 7, 8, 10, 11]
```

```
#####repeat the above activity to find the smallest and largest element of the list. (suppose all the elements are integer values)
```

```
# create the first list
list1 = []
n = int(input("Enter the number of elements in list 1: "))
for i in range(n):
    elem = int(input("Enter element " + str(i+1) + ": "))
    list1.append(elem)

# create the second list
list2 = []
m = int(input("Enter the number of elements in list 2: "))
for i in range(m):
    elem = int(input("Enter element " + str(i+1) + ": "))
    list2.append(elem)

# merge the two lists
merged_list = list1 + list2

# sort the merged list
sorted_list = sorted(merged_list)

# display the sorted list
print("Merged and sorted list:", sorted_list)
print(max(merged_list))
print(min(merged_list))
```

```
Enter the number of elements in list 1: 2
Enter element 1: 3
Enter element 2: 4
Enter the number of elements in list 2: 4
Enter element 1: 5
Enter element 2: 6
Enter element 3: 7
Enter element 4: 8
Merged and sorted list: [3 4 5 6 7 8]
```

