```python
C=[]
n=int(input("Enter the no. of students in class:"))
print("Enter the Students in class and press enter:")
for i in range(n):
    data=input()
    C.append(data)
print("Students in whole class:",C)
#############Students who play cricket ****************
A=[]
n1=int(input("Enter the No. of students who play Cricket: "))
print("Enter the Students Name who play Cricket:")
for i in range(n1):
    data=input()
    A.append(data)
j=[x for x in A if(x in C)]
print("Students who play cricket from class:",j)
#****************#Students who play badminton*******************
B=[]
n2=int(input("Enter the no. of students who play badminton"))
print("Enter the students name who play Badminton")
for i in range(n2):
    data=input()
    B.append(data)
f=[x for x in B if(x in C)]
print("Students who play badminton from class:",f)
```

```python
#############Students who play either Cricket or badminton but not both######################3

c=[x for x in f if(x not in j)]

d=[x for x in j if(x not in f)]

cd=c+d

print("Students who play either cricket nor badminton but not both:",cd)

print()

#############list of students who play both Cricket and Badminton###############

print()

cb=[x for x in f if x in j]

print("Students who play both cricket and badminton",cb)

print()

#############Students who play only Cricket###########

s=[x for x in j if(x not in f)]

print("Students who play only Cricket:",s)

##########Students who play only Badminton###############33

m=[x for x in f if(x not in j)]

print("Students who play only Badminton:",m)

###############No. of students who play neither cricket nor badminton###########

y=[]

for i in C:

    if i not in j:

        y.append(i)

y_=[]

for j in C:

    if j not in f:
```

```
    y_.append(j)

  a=[x for x in y if x in y_]
```

print ("No. of students who play neither cricket nor badminton:",len(a))

print()

 [?2004l

Enter the no. of students in class:8

Enter the Students in class and press enter:

arthur   Ha arthur

niko

yommy   tommy

carl

trevor

franklin

michael

dutch

Students in whole class: ['arthur ', 'niko', 'tommy ', 'carl', 'trevor', 'franklin', 'michael', 'dutch']

Enter the No. of students who play Cricket: 6

Enter the Students Name who play Cricket:

arthur

dutch

trevor

carl

tommy

franklin

Students who play cricket from class: ['arthur ', 'dutch', 'trevor', 'carl', 'franklin']

Enter the no. of students who play badminton4

Enter the students name who play Badminton

michael

tommy

franklin

carl

Students who play badminton from class: ['tommy ', 'franklin', 'carl']

Students who play either cricket nor badminton but not both: ['tommy ', 'arthur ', 'dutch', 'trevor']

Students who play both cricket and badminton ['franklin', 'carl']

Students who play only Cricket: ['arthur ', 'dutch', 'trevor']

Students who play only Badminton: ['tommy ']

No. of students who play neither cricket nor badminton: 2