```python
#Lab assignment no.1
#Name:Samruddhi Balasaheb Rokade
#Roll No:29    #Div:B
#Title:Sets Operation with the help of functions
res=[]
U=[]
listA=[]
listB=[]
listC=[]
C=int(input("Enter the no. of students:"))
for i in range(C):
  name=input("Enter the name of students:")
  U.append(name)
print(U)
def accept(a,b):
  P=int(input("Enter the no. of students who play %s:"%b))
  for i in range(P):
    N=input("Enter the name of student who play %s:" %b)
    a.append(N)
  print("List of students who play %s:"%b,a)
accept(listA,"Cricket")
accept(listB,"Badminton")
accept(listC,"Football")
def Inter(a,b):
  for i in a:
   if i in b:
     res.append(i)
  return res
def Union(a,b):
  res=a.copy()
  for i in b:
    if i not in a:
      res.append(i)
  return res
def Minus(a,b):
  res=[]
  for i in a:
    if i not in b:
      res.append(i)
  return res
F=Union(listA,listB)
S=Inter(listA,listB)
print("List of students who play both cricket and badminton:",res)
print("Students who play neither cricket or badminton but not both",Minus(F,S))
print("Students who play either cricket nor badminton ",Minus(listC,S))
print("Students who play  cricket and football but not badminton",Minus(Union(listA,listC)
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Enter the no. of students:7
Enter the name of students:A
Enter the name of students:B
Enter the name of students:C
Enter the name of students:D
Enter the name of students:E
Enter the name of students:F
Enter the name of students:G
['A', 'B', 'C', 'D', 'E', 'F', 'G']
Enter the no. of students who play Cricket:4
Enter the name of student who play Cricket:A
Enter the name of student who play Cricket:B
Enter the name of student who play Cricket:C
Enter the name of student who play Cricket:D
List of students who play Cricket: ['A', 'B', 'C', 'D']
Enter the no. of students who play Badminton:5
Enter the name of student who play Badminton:D
Enter the name of student who play Badminton:E
Enter the name of student who play Badminton:F
Enter the name of student who play Badminton:G
Enter the name of student who play Badminton:C
List of students who play Badminton: ['D', 'E', 'F', 'G', 'C']
Enter the no. of students who play Football:4
Enter the name of student who play Football:B
Enter the name of student who play Football:C
Enter the name of student who play Football:F
Enter the name of student who play Football:G
List of students who play Football: ['B', 'C', 'F', 'G']
List of students who play both cricket and badminton: ['C', 'D']
Students who play neither cricket or badminton but not both ['A', 'B', 'E', 'F', 'G']
Students who play either cricket nor badminton  ['B', 'F', 'G']
Students who play  cricket and football but not badminton ['A', 'B']
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