```c
#include<stdio.h>
#include<stdlib.h>
void main()
{
 int ch,A[50],B[50],C[50],m,n,i;
 do
 {
  printf("\nInput choice to perform: ");
  printf("\n1.Union\t2.Intersection\t3.Difference\t4.Exit");
  printf("\nChoice: ");
  scanf("%d",&ch);
 switch(ch)
 {
  case 1:printf("\nEnter cardinality of first set: ");
         scanf("%d",&m);
         printf("\nEnter cardinality of second set: ");
         scanf("%d",&n);
         if(m!=n)
         {
         printf("\nCannot perform union!");
         break;
          }
         printf("\nEnter elements of first set:(0/1) ");
         for(i=0;i<m;i++)
         {
           scanf("%d",&A[i]);
          }
         printf("\nEnter elements of second set:(0/1) ");
         for(i=0;i<n;i++)
         {
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      scanf("%d",&B[i]);
     }
    printf("\nElements of set1 union set2: ");
    for(i=0;i<m;i++)
    {
     C[i]=A[i]|B[i];
     printf("%d ",C[i]);
     }
    break;
case 2:printf("\nEnter cardinality of first set: ");
    scanf("%d",&m);
    printf("\nEnter cardinality of second set: ");
    scanf("%d",&n);
    if(m!=n)
    {
    printf("\nCannot perform intersection!");
    break;
     }
    printf("\nEnter elements of first set:(0/1) ");
    for(i=0;i<m;i++)
    {
      scanf("%d",&A[i]);
     }
    printf("\nEnter elements of second set:(0/1) ");
    for(i=0;i<n;i++)
    {
      scanf("%d",&B[i]);
     }
    printf("\nElements of set1 intersection set2:");
    for(i=0;i<m;i++)
    {
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        C[i]=A[i]&B[i];
        printf("%d ",C[i]);
        }
       break;
case 3:printf("\nEnter cardinality of first set: ");
       scanf("%d",&m);
       printf("\nEnter cardinality of second set: ");
       scanf("%d",&n);
       if(m!=n)
       {
       printf("\nCannot perform difference!");
       break;
        }
       printf("\nEnter elements of first set:(0/1) ");
       for(i=0;i<m;i++)
       {
         scanf("%d",&A[i]);
        }
       printf("\nEnter elements of second set:(0/1) ");
       for(i=0;i<n;i++)
       {
         scanf("%d",&B[i]);
        }
       for(i=0;i<n;i++)
       {
        if(A[i]==0)
        C[i]=0;
        else
        {
         if(B[i]==1)
         C[i]=0;
```

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            else
            C[i]=1;
            }
           }
          printf("\nElements of set1 - set2: ");
          for(i=0;i<m;i++)
          {
           printf("%d ",C[i]);
           }
          break;
  case 4:printf("\nProgram exit successfully!");
          exit(0);
          break;
  default:printf("\nInvalid choice!");
  };
 }while(1);

}
```

Output

```
Input choice to perform:
1.Union 2.Intersection  3.Difference    4.Exit
Choice: 1

Enter cardinality of first set: 3

Enter cardinality of second set: 3

Enter elements of first set:(0/1) 1
0
1

Enter elements of second set:(0/1) 0
1
0

Elements of set1 union set2: 1 1 1
Input choice to perform:
1.Union 2.Intersection  3.Difference    4.Exit
Choice: 2

Enter cardinality of first set: 3

Enter cardinality of second set: 3

Enter elements of first set:(0/1) 1
0
1

Enter elements of second set:(0/1) 0
1
1

Elements of set1 intersection set2:0 0 1
Input choice to perform:
1.Union 2.Intersection  3.Difference    4.Exit
Choice: 3

Enter cardinality of first set: 3

Enter cardinality of second set: 3

Enter elements of first set:(0/1) 0
1
0

Enter elements of second set:(0/1) 1
0
1

Elements of set1 - set2: 0 1 0
```