**Program to find the symmetric difference of the two sets.**

#include<stdio.h>

int main()

{

int a[10],b[10],c[10],d[10],m=0,k=0,n=0,n1,n2,l,i,j,sy[100];

printf("Enter size of set A");

scanf("%d",&n1);

printf("Enter element of set");

for( i=0;i<n1;i++)

scanf("%d",&a[i]);

printf("Enter size of set B");

scanf("%d",&n2);

printf("Enter element of set");

for( i=0;i<n2;i++)

scanf("%d",&b[i]);

// logic for find A-B

for( i=0;i<n1;i++)

{

// here we check that is b[i] already present in the ans set

// if present then ignore it otherwise add it to the ans set

for(j=0;j<n2;j++)

{

if(b[j]==a[i])

break;

}

if(j==n2)

{

for(l=0;l<k;l++)

{

if(c[l]==a[i])

break;

}

if(l==k)

{

c[k]=a[i];

k++;

}

}

}

// logic for find B-A

for( i=0;i<n2;i++)

{

for(j=0;j<n1;j++)

{

if(b[i]==a[j])

break;

}

if(j==n1)

{

// here we check that is b[i] already present in the ans set

// if present then ignore it otherwise add it to the ans set

for(l=0;l<m;l++)

{

if(d[l]==b[i])

break;

}

if(l==m)

{

d[m]=b[i];

m++;

}

}

}

//logic for symmetric Difference

for(i=0;i<k;i++)

{

sy[n]=c[i];

n++;

}

for(i=0;i<m;i++)

{

sy[n]=d[i];

n++;

}

printf("\nsymmetric Difference of sets is:-\n");

for(i=0;i<n;i++)

printf("%d ",sy[i]);

return 0;

}

**Output:-**

Enter size of set A 4

Enter element of set 3 2 4 5

Enter size of set B 4

Enter element of set 1 2 7 8

symmetric Difference of sets is: 3 4 5 1 7 8