**PROGRAM-1**

**Write a program in C to create two sets and perform union operation on these two sets.**

#include<stdio.h>

void main()

{

int i,k=0,x[10],y[10],c[25],j,n,n1,d[25],f=0;

printf("\n how many elements in SET 1:");

scanf("%d",&n);

printf("\n enter 1st SET elements");

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

{

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

}

printf("\n how many elements in set 2:");

scanf("%d",&n1);

printf("\n enter 2st SET elements");

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

{

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

}

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

{

c[k]=x[i];

k++;

}

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

{

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

{

if(y[i]==x[j])

break;

}

if(j==n)

{

c[k]=y[i];

k++;

}

}

printf("\n the union set is:{");

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

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

printf("}\n");

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

{

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

{

if(y[i]==x[j])

break;

}

if(i!=n1)

{

d[f]=y[i];

f++;

}

}

}

**OUTPUT:**

how many elements in SET 1:3

 enter 1st SET elements1

2

3

 how many elements in set 2:3

 enter 2st SET elements3

4

5

 the union set is:{12345}