

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}
```