**Objective- To find union of two sets input as array.**

#include<stdio.h>

int main()

{

int a1[20],a2[20],u[40],i,j,k,n,m;

printf("Enter size of first array:");

scanf("%d",&n);

printf("Enter elements of first array in ascending order:\n");

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

scanf("%d",&a1[i]);

}

printf("\nEnter size of second array:");

scanf("%d",&m);

printf("Enter elements of second array in ascending order:\n");

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

scanf("%d",&a2[i]);

}

for(i=0,j=0,k=0;i<n&&j<m;){

if(a1[i]<a2[j]){

u[k]=a1[i];

i++;

k++;

}

else if(a1[i]>a2[j]){

u[k]=a2[j];

j++;

k++;

}

else{

u[k]=a1[i];

i++;

j++;

k++;

}

}

if(i<n){

for(;i<n;++i){

u[k]=a1[i];

k++;

}

}

else if(j<m){

for(;j<m;++j){

u[k]=a2[j];

k++;

}

}

printf("\nUnion of two arrays is:\n");

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

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

}

getch();

return 0;

}