/\*array union and intersection\*/

#include<stdio.h>

void printunion(int array1[],int n,int array2[],int m)

{

printf("the result of array union\n");

int i=0,j=0;

while(i<n && j<m)

{

if(array1[i]<array2[j])

{

printf("%d\n",array1[i++]);

}

else if(array2[j]<array1[i])

{

printf("%d\n",array2[j++]);

}

else

{

printf("%d\n",array1[i]);

i++;

j++;

}

}

while(i<n)

printf("%d\n",array1[i++]);

while(j<m)

printf("%d\n",array2[j++]);

}

void printintersection(int array1[],int n,int array2[],int m)

{

int i,j,k=0,count=0;

int b[k];

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

{

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

{

if(array1[i]==array2[j])

{

b[k]=array1[i];

k++;

count++;

}

}

}

printf("the result of array intersection\n");

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

{

printf("%d\n",b[i]);

}

}

int main()

{

int n,m,i,j;

printf("enter the value of n for 1st array\n");

scanf("%d",&n);

printf("enter the value of m for the 2nd array\n");

scanf("%d",&m);

int array1[n],array2[m];

printf("enter the values for 1st array\n");

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

{

scanf("%d",&array1[i]);

}

printf("enter the values for 2nd array\n");

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

{

scanf("%d",&array2[j]);

}

printunion(array1,n,array2,m);

printintersection(array1,n,array2,m);

}

