// 18. Given two ordered array of integers,write a program to merge the two arrays to get an ordered array

#include<iostream>

using namespace std;

int main()

{

int m,n,A[20],B[20],C[40];

cout<<"Enter limit of first array:- ";

cin>>m;

cout<<"\n Enter array:- ";

for(int a=0;a<m;a++)

cin>>A[a];

cout<<"\nEnter limit of second array:- ";

cin>>n;

cout<<"\nEnter array:-";

for(int b=0;b<n;b++)

cin>>B[b];

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

while(i<m && j<n)

{

if(A[i]==B[j])

{

C[k++]=A[i++];

j++;

}

else if(A[i]<B[j])

C[k++]=A[i++];

else

C[k++]=B[j++];

}

if(i<m)

{

while(i<m)

C[k++]=A[i++];

}

if(j<n)

{

while(j<n)

C[k++]=B[j++];

}

cout<<"\n New array is :- ";

for(int x=0;x<k;x++)

cout<<C[x]<<endl;

system("pause");

return 0;

}

Output:-

