#include<stdio.h>

void main()

{

int a[20],b[20],c[40],i,j,k,m,n;

printf("enter number of elements in A\n");

scanf("%d",&m);

printf("Enter %d value in sorted order \n",m);

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

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

printf("enter number of elements in B \n");

scanf("%d",&n);

printf("Enter %d value in sorted order \n",n);

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

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

/\* Merge sort logic \*/

i=j=k=0;

/\* Comparing elements \*/

while(i<m&&j<n)

if(a[i]>=b[j])

c[k++]= b[j++];

else

c[k++]=a[i++];

/\* Remaining Element of A \*/

while(i<m)

c[k++]=a[i++];

/\* Remaining Element of b \*/

while(j<n)

c[k++]= b[j++];

printf("\nA list is :\n");

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

printf("%5d",a[i]);

printf("\nB list is :\n");

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

printf("%5d",b[i]);

printf("\nC list is :\n");

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

printf("%5d",c[i]);

}



