```c
#include<stdio.h>
void main()
{
    int a[20],b[20],c[40],i,j,k,m,n;
    printf("Size of first array\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 size of Second array \n");
    scanf("%d",&n);
    printf("Enter %d value in sorted order
\n",n);
    for(i=0;i<n;i++)
scanf("%d",&b[i]);


    i=j=k=0;

    while(i<m&&j<n)
    if(a[i]>=b[j])
        c[k++]= b[j++];
    else
        c[k++]=a[i++];
    while(i<m)
        c[k++]=a[i++];
    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]);



}
```

Output

```
Size of first array
2
Enter 2 value in sorted order
3
6
Enter size of Second array
4
Enter 4 value in sorted order
4
5
8
9

A list is :
    3    6
B list is :
    4    5    8    9
C list is :
    3    4    5    6    8    9
```

```
Size of first array
3
Enter 3 value in sorted order
1
5
7
Enter size of Second array
3
Enter 3 value in sorted order
2
4
8

A list is :
     1     5     7
B list is :
     2     4     8
C list is :
     1     2     4     5     7     8
```