

```

#include<stdio.h>

void main()
{
    int a[20],b[20],c[40],i,j,k,m,n;

    printf("enter how many value in A List\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 how many value in B List\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;

    /* Compare A and B List */
    while(i<m&&j<n)
    if(a[i]>=b[j])
        c[k++]= b[j++];
    else
        c[k++]=a[i++];

    /* Remaining Element of A List */
    while(i<m)
        c[k++]=a[i++];

    /* Remaining Element of b List */
    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]);  
  
}
```