Program to merge two sorted arrays.

```c
 #include <stdio.h>

int main()

{

int ar1[10], ar2[10], ar3[20];

int m,n,i,j,k;

printf("Enter number of elements in array 1 : ");

scanf("%d",&m);

printf("Enter array 1 in sorted order : ");

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

{

scanf("%d",&ar1[i]);

}

printf("Enter number of elements in array 2 : ");

scanf("%d",&n);

printf("Enter array 2 in sorted order : ");

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

{

scanf("%d",&ar2[i]);

}

i=j=k=0;

while(i<m&&j<n)
{
```

```c
if(ar1[i]>ar2[j])
{
ar3[k++]= ar2[j++];

}

else

{

ar3[k++]=ar1[i++];

}

}

while(i<m)

{
ar3[k++]=ar1[i++];
}
while(j<n)
{
ar3[k++]= ar2[j++];
}
printf("\nFirst array is :");
for(i=0;i<m;i++)
{
printf("%d",ar1[i]);
}
printf("\nSecond array is :");
for(i=0;i<n;i++)
{
printf("%d",ar2[i]);
}
printf("\nMerged array is :");
for(i=0;i<m+n;i++)
{
printf("%d",ar3[i]);
}

return 0;

}
```

Run   Debug   Stop

source code

```c
 5    C#, VB, Perl, Swift, Pro
 6    Code, Compile, Run and D
 7
 8    ***********************
 9    #include <stdio.h>
10    int main()
11    {
12    int ar1[10], ar2[10], ar
13    int m,n,i,j,k;
14    printf("Enter number of
15    scanf("%d",&m);
16    printf("Enter array 1 in
17    for(i=0;i<m;i++)
18    {
19    scanf("%d",&ar1[i]);
20    }
21    printf("Enter number of
22    scanf("%d",&n);
23    printf("Enter array 2 in
24    for(i=0;i<n;i++)
25    {
26    scanf("%d",&ar2[i]);
27    }
28    i=j=k=0;
29    while(i<m&&j<n)
30    {
31    if(ar1[i]>ar2[j])
32    {
```

```c
37    ar3[k++]=ar1[i++];
38    }
39    }
40    while(i<m)
41    {
42    ar3[k++]=ar1[i++];
43    }
44    while(j<n)
45    {
46    ar3[k++]= ar2[j++];
47    }
48    printf("\nFirst array is
49    for(i=0;i<m;i++)
50    {
51    printf("%d",ar1[i]);
52    }
53    printf("\nSecond array i
54    for(i=0;i<n;i++)
55    {
56    printf("%d",ar2[i]);
57    }
58    printf("\nMerged array i
59    for(i=0;i<m+n;i++)
60    {
61    printf("%d",ar3[i]);
62    }
63    return 0;
64    }
```

input

```
/*****************************

Welcome to GDB Online
```

input

```
Enter number of elements in arra
y 1 : 3
Enter array 1 in sorted order :1
2
3
Enter number of elements in arra
y 2 : 4
Enter array 2 in sorted order :4
5
6
7

First array is :123
Second array is :4567
Merged array is :1234567

...Program finished with exit co
de 0
Press ENTER to exit console.
```

Last modified: 3:47 p.m.