

[■] PRACT6A.C

```
#include<stdio.h>
#include<conio.h>
int max,a[20],b[20];
void merge(int low, int mid , int high){
int l1,l2,i;

for(l1=low,l2=mid+1,i=low;l1<=mid && l2<=high;i++){
if(a[l1]<=a[l2])
b[i]=a[l1++];
else
b[i]=a[l2++];
}

while(l1<=mid)
b[i++]=a[l1++];
while(l2<=high)
b[i++]=a[l2++];
for(i=low;i<=high;i++)
a[i]=b[i];
}

void sort(int low, int high){
```

1:1

[■] PRACT6A.C

```
void sort(int low, int high){
int mid;
if(low<high){
mid=(low+high)/2;
sort(low,mid);
sort(mid+1,high);
merge(low,mid,high);
}
else{
return;
}
}

void main(){
int i;
clrscr();
printf("Enter Size of the Array:");
scanf("%d",&max);
printf("\nEnter Elements:\n");
for(i=0;i<max;i++){
scanf("%d",&a[i]);
}
```

41:1

PRACT6A.C

```
[ ]  
}  
}  
  
void main(){  
int i;  
clrscr();  
printf("Enter Size of the Array:");  
scanf("%d",&max);  
printf("\nEnter Elements:\n");  
for(i=0;i<max;i++){  
scanf("%d",&a[i]);  
}  
  
sort(0,max);  
printf("\nMerged Sorted Array:\n");  
for(i=1;i<=max;i++){  
printf("%d\n",a[i]);  
}  
getch();  
}
```

51:1

Enter Size of the Array:5

Enter Elements:

23

2

9

66

1

Merged Sorted Array:

1

2

9

23

66

-