```c
#include<stdio.h>

int main() {
int arr1[30], arr2[30], res[60];
int i, j, k, n1, n2;

    printf("Enter the size of first array : ");
scanf("%d", &n1);
    printf("Enter elements in first array : ");

for (i = 0; i < n1; i++) {
scanf("%d", &arr1[i]);
}

    printf("Enter the size of second array : ");
scanf("%d", &n2);
    printf("Enter  elements in first array : ");

for (i = 0; i < n2; i++) {
scanf("%d", &arr2[i]);
}

i = 0;
j = 0;
k = 0;
```

```c
while (i < n1 && j < n2) {

if (arr1[i] <= arr2[j]) {

res[k] = arr1[i];

i++;

k++;

} else {

res[k] = arr2[j];

k++;

j++;

}

}


while (i < n1) {

res[k] = arr1[i];

i++;

k++;

}


while (j < n2) {

res[k] = arr2[j];

k++;

j++;

}


printf("\nArray merged in ascending order:");
```

```c
for (i = 0; i < n1 + n2; i++)

printf("%d ", res[i]);



return (0);

}
```

```
Enter the size of first array : 5
Enter elements in first array : 10
20
30
40
50
Enter the size of second array : 6
Enter  elements in first array : 55
60
65
70
75
80

Array merged in ascending order:10 20 30 40 50 55 60 65 70 75 80

...Program finished with exit code 0
Press ENTER to exit console.
```