

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
int arr1[20], arr2[20], k;
```

```
int res[k], i, j, m, n;
```

```
printf("Enter the size of elements");
```

```
printf("Enter first element of array");
```

```
scanf("%d", &m);
```

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

```
{
```

```
scanf("%d", &arr1[i]);
```

```
}
```

```
printf("Enter second element of array");
```

```
{
```

```
scanf("%d", &n);
```

```
for(j=0; j<n; j++)
```

```
{
```

```
scanf("%d", &arr2[j]);
```

```
}
```

```
while(k<=j+m)
```

```
{
```

```
if(arr1[i] < arr2[j])
```

```
{
```

```
res[k] = arr1[i];
```

```
i++;
```

```
k++;
```

```
}
```

```
else
```

```
{
```

```
arr[k] = arr[j];
```

```
j++;
```

```
k++;
```

```
}
```

```
{
```

```
while (l < m)
```

```
{
```

```
arr[k] = arr[l];
```

```
l++;
```

```
j++;
```

```
}
```

```
while (j < n)
```

```
{
```

```
arr[k] = arr[j];
```

```
j++;
```

```
k++;
```

```
}
```

```
for (i = 0; i < m + n; i++) {
```

```
{
```

```
printf("%d", arr[i]);
```

```
}
```

```
for (j = 0; j < m + n; j++) {
```

```
{
```

```
printf("%d", arr[j]);
```

```
}
```

```
printf("The sorted array is:");
```

```
return 0;
```

```
}
```