

## Merging Array

```
#include<iostream>
using namespace std;

void mergearrays(int arr1[], int arr2[], int n1,
                int n2, int arr3[])
{
    int i = 0, j = 0, k = 0;
    // traverse the arr1 and insert its element in arr3
    while(i < n1){
        arr3[k++] = arr1[i++];
    }

    // now traverse arr2 and insert in arr3
    while(j < n2){
        arr3[k++] = arr2[j++];
    }

    // sort the whole array arr3
    sort(arr3, arr3+n1+n2);
}

// Driver code
int main()
{
    int arr1[] = {1, 2, 4, 6};
    int n1 = sizeof(arr1) / sizeof(arr1[0]);

    int arr2[] = {3, 5, 7, 9};
    int n2 = sizeof(arr2) / sizeof(arr2[0]);

    int arr3[n1+n2];
    mergeArrays(arr1, arr2, n1, n2, arr3);

    cout << "Array after merging" <<endl;
    for (int i=0; i < n1+n2; i++)
        cout << arr3[i] << " ";

    return 0;
}
```

Array after merging  
1,2,3,4,5,6,7,8,9

