

```
//Answer on Question #38344, Programming, C++
```

```
#include <cstdlib>
```

```
#include <iostream>
```

```
using namespace std;
```

```
void sort(int A[],int size,int type);
```

```
//main function
```

```
int main(int argc, char *argv[])
```

```
{
```

```
    int n1,n2;//variable for n1 n2
```

```
    cout<<"Enter total values for first array: ";
```

```
    cin>>n1;//read n1
```

```
    cout<<"Enter total values for second array: ";
```

```
    cin>>n2;//read n2
```

```
    //variable for arrays
```

```
    int firstArray[n1];
```

```
    int secondArray[n2];
```

```
    int n3=n1+n2;//calculate total number of values
```

```
    int mergeArray[n3];
```

```
    //enter values for first array
```

```
    cout<<"Enter values for first array:\n";
```

```
    for(int i=0;i<n1;i++){
```

```
        cout<<"Enter value "<<i<<": ";
```

```
        cin>>firstArray[i];
```

```
    }
```

```
    //enter values for second array
```

```
    cout<<"Enter values for second array:\n";
```

```
    for(int i=0;i<n2;i++){
```

```
        cout<<"Enter value "<<i<<": ";
```

```
        cin>>secondArray[i];
```

```
    }
```

```
    //sort first array
```

```
    sort(firstArray,n1,1);
```

```

//sort second array
sort(secondArray,n2,2);
//merge Array
for(int i=0;i<n1;i++){
    mergeArray[i]=firstArray[i];
}
int count=0;
for(int i=n1;i<n3;i++){
    mergeArray[i]=secondArray[count];
    count++;
}
//display the data from all the three arrays
cout<<"Merge Array:\n";
for(int i=0;i<n3;i++){
    cout<<mergeArray[i]<<" ";
}
//new lines
cout<<"\n\n";
system("PAUSE");
return 0;
}
//function sort array
void sort(int A[],int size,int type){
    int temp;
    int i,j;
    for (i= 1; i<size; i++ ) {
        //loop to control number of comparisons per pass
        for (j = 0; j < size-1; j++ ) {
            // compare adjacent elements and swap them if first element is greater than second element
            if(type==1){
                if (A[j] > A[j + 1]) {
                    temp = A[j]; //swap elements for this use any variable temp
                    A[j] = A[j + 1];
                    A[j + 1] = temp;
                }
            }
        }
    }
}

```

```
    }  
  }  
  if(type==2){  
    if (A[j] < A[j + 1]) {  
      temp = A[j]; //swap elements for this use any variable temp  
      A[j] = A[j + 1];  
      A[j + 1] = temp;  
    }  
  }  
}  
}  
}
```