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#include<iostream>
using namespace std;
void ArraySort( int array[], int size);
void ArrayDisplay(int array[], int size);
int main()
{
    int first_size = 0, second_size = 0, third_size = 0;
    cout<<"Input size of first array"<<endl;
    cin>>first_size;
    cout<<"Input first array"<<endl;
    int *first_array = new int[first_size];
    for( int i = 0; i < first_size; i++)
        cin>>first_array[i];
    cout<<endl;

    ArraySort(first_array, first_size);
    // Reverse
    int j = first_size - 1;
    for(int i = 0; i < j; ++i, --j)
    {
        int t = first_array[i];
        first_array[i] = first_array[j];
        first_array[j] = t;
    }
    //ArrayDisplay(first_array, first_size);
    cout<<"Input size of second array"<<endl;
    cin>>second_size;
    cout<<"Input second array"<<endl;
    int *second_array = new int[second_size];
    for( int i = 0; i < second_size; i++)
        cin>>second_array[i];

    ArraySort(second_array, second_size);

    int *third_array = new int [first_size + second_size];

    for ( int i = 0; i < first_size + second_size; i++)
    {
        if ( i > (first_size - 1))  third_array[i] = second_array[i -
first_size];
        else
            third_array[i] = first_array[i];
    }
    ArraySort(third_array, first_size + second_size);
    // Reverse
    j = first_size + second_size - 1;
    for(int i = 0; i < j; ++i, --j)
    {
        int t = third_array[i];
        third_array[i] = third_array[j];
        third_array[j] = t;
    }

    cout<<"First array : "<<endl;
    ArrayDisplay(first_array, first_size);
    cout<<"Second array : "<<endl;
    ArrayDisplay(second_array, second_size);
    cout<<"Third array : "<<endl;
    ArrayDisplay(third_array, first_size + second_size);
    cout<<endl;
}

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        system("pause");
    return 0;
}

void ArraySort(int array[], int size)
{
    for (int i = 0; i < size; i++)
        for (int j = i+1; j < size; j++)
            if (array[i] < array[j])
                {
                    int buf = array[i];
                    array[i] = array[j];
                    array[j] = buf;
                }
}

void ArrayDisplay(int array[], int size)
{
    for (int i = 0; i < size; i++)
        cout<< array[i]<<" ";

    cout<<endl;
}
```