Merging Arrays

Lab Exam 2

Computer Programming Date: 25 November, 2019

Problem Code: P1 [15 Marks]

Problem Statement: Given two sorted arrays in increasing order, merge them into one arrays sorted in increasing order.

Input

First line of input is T, denoting number of test cases. Each test cases have four lines: first line has N1, denoting the size of first array, second line has N1 sorted elements of first array, third line has N2, denoting the size of second array, fourth line has N2 sorted elements of second array.

Output

There should be T lines of output, each having N1 + N2 sorted elements of final array.

Constraints

$$\begin{split} &1 \leq T \leq 10 \\ &1 \leq N \leq 10^5 \\ &1 \leq A_i, B_i \leq 10^6 \end{split}$$

Time Limit: 1 sec

Memory Limit: 256 MB

Sample Test Case

Input	Output
3	1 2 2 3
2	1 2 2 3
1 2	1 2 3 4 5 6 7
2	
2 3	
2	
2 3	
2	
1 2	
3	
2 4 6	
4	
1 3 5 7	