73247. Merge two arrays

Input file:	standard input
Output file:	standard output
Time limit:	1 second
Memory limit:	256 megabytes

Given two sorted integer arrays a and b, merge a into b as one sorted array.

Input

The first line contains one integer n $(1 \leqslant n \leqslant 10^5)$ — a size. The second line contains n integers a_i $(1 \leqslant a_i \leqslant 10^5)$ — elements of array. The third line contains one integer m $(1 \leqslant m \leqslant 10^5)$ — b size. The next line contains m integers b_i $(1 \leqslant b_i \leqslant 10^5)$ — elements of array.

Output

Array B into sorted order.

Examples

standard input	standard output
5 4 5 6 7 10 5 2 4 6 7 8	2 4 4 5 6 6 7 7 8 10
3 1 4 7 1 6	1 4 6 7
4 2 5 7 8 3 2 4 9	2 2 4 5 7 8 9
2 3 10 4 1 3 6 8	1 3 3 6 8 10
1 4 4 1 1 5 6	1 1 4 5 6