Sorted List Matching Problem

The Problem

Given two lists of unique, sorted non-negative integers, output a sorted list of integers that appear on both lists.

Input Format

The first line of the input will have a single positive integer, *n*, representing the number of input cases. The input cases follow, each being described in four lines. The first line of each input case will contain a single positive integer, l_1 *($l_1 \leq 100000$)*, representing the length of the first list. The second line of each input case will contain l_1 space-separated non-negative integers, in sorted order, the values for the first list, in order. The third line of each test case will contain a single positive integer, l_2 *($l_2 \leq 100000$)*, representing the length of the second list. The fourth line of each input case will contain l_2 space-separated non-negative integers, in sorted order, the values for the second list, in order. All integers in each list will fit into 32-bit signed integers.

Output Format

For each input case, print out a list of all the matches between the two input lists, with a space following each output value.

Sample Input

```
2
5
1 3 4 5 6
7
2 4 7 8 12 14 15
5
2 3 6 8 10
4
1 3 8 9
```

Sample Output

```
4
3 8
```