**Problem Description**

You are given two integer arrays **a** and **b**. Your task is to find their intersection. Each element in the result must appear as many times as it shows in both arrays.

Return the result in any order.

Input:

* The first line contains an integer n (1 ≤ n ≤ 1000) – the size of array a.
* The second line contains n integers a1, a2,…..an (1 ≤ a[i] ≤ 1000).
* The third line contains an integer m (1 ≤ m ≤ 1000)
* The fourth line contains m integers b1, b2,…., bm  (1≤b[i]≤1000).

Output:

* Print the elements of the intersection array. Each element must appear as many times as it shows in both arrays. The output can be in any order.

Examples:

**Input 1**:

4

1 2 2 1

2

2 2

**Output 1**:

2 2

**Input 2**:

3

4 9 5

5

9 4 9 8 4

**Output 2**:

4 9