

Fun with Sequences (Act 2)

You are given a sorted sequence of n integers $S = s_1, s_2 \dots s_n$ and a sorted sequence of m integers $Q = q_1, q_2 \dots q_m$.

Please print in ascending order all such s_j that belongs to Q .

Input data specification

In the first line you are given one integer $2 \leq n \leq 100$, and in the following line n integers:
 $-100 \leq s_j \leq 100, s_j \leq s_{j+1}$.

In the third line you are given one integer $2 \leq m \leq 100$, and in the following line m integers:
 $-100 \leq q_j \leq 100, q_j \leq q_{j+1}$.

Output data specification

The sequence of requested integers separated by spaces.

Example

Input:

```
5
-2 -1 0 1 4
6
-3 -2 -1 1 2 3
```

Output:

```
-2 -1 1
```