Problem C: Pre, in and post

Time Limit: 1 Sec Memory Limit: 128 MB
Submit: 415 Solved: 208
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Description

You are given the pre-order and in order traversal of the binary tree, please find the post-order of this tree.

Input

The first line will be an integer $T(1 \le T \le 10)$, which is the number of test cases.
For each test data:
The first line contains one integer $N(1 \le N \le 10^3)$ — the number of nodes of the tree
Then follows two lines:
The first line contains N integers ranging from 1 to N, indicating the pre-order traversal of the tree.
The second line contains N integers ranging from 1 to N, indicating the in-order traversal of the tree.

Output

For each case, contains one line with N integer, the post-order traversal of the tree.

Sample Input

```
1
5
1 2 4 3 5
2 4 1 5 3
```

Sample Output

```
4 2 5 3 1
```

HINT

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