



Ticket Mess

One day, Elif wanted to buy a one-way train ticket to the city she wanted to visit, but she had no luck and couldn't find a direct ticket to her destination. So, she had to buy her tickets with some transfers. Fortunately, she would not have to visit a place more than once. Everything seemed fine until something bad had happened. She was not careful, so she messed up the tickets. Can you help Elif to put the tickets in order so that she can figure out the order of the cities she will visit?

Input Format

- The first line contains the number of tickets **N**.
- Each of the next **N** lines contains the **source and destination of a ticket**.
- All place names consist of only lower case english characters.

Constraints

- All place names are strings
- $2 \leq N \leq 10^5$
- $1 \leq \text{length of a place name} \leq 10$

Output Format

- One line containing the list of cities Elif will visit in order.

Sample Input 0

```
3
istanbul tallinn
aydin ankara
ankara istanbul
```

Copy

Sample Output 0

```
aydin ankara istanbul tallinn
```

Copy

Sample Input 1

Copy

Submit Solution

✓ **Points:** 1

⌚ **Time limit:** 1.5s
Java 8: 4.0s
Python: 8.0s

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```
10
l awgrav
qqdk amo
et l
eagwyn xvqeewq
xvqeewq jtxhl
amo blgi
blgi eagwyn
bdfrrjffngv qqdk
nvdr et
awgrav bdfrrjffngv
```

Sample Output 1

```
nvdr et l awgrav bdfrrjffngv qqdk amo blgi eagwyn xvqeewq jtxhl
```

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