

In a town, there are n people labeled from 1 to n . There is a rumor that one of these people is secretly the town judge.

If the town judge exists, then:

1. The town judge trusts nobody.
2. Everybody (except for the town judge) trusts the town judge.
3. There is exactly one person that satisfies properties **1** and **2**.

You are given an array `trust` where `trust[i] = [ai, bi]` representing that the person labeled `ai` trusts the person labeled `bi`.

Return *the label of the town judge if the town judge exists and can be identified, or return `-1` otherwise.*

Example 1:

Input: `n = 2, trust = [[1,2]]`
Output: `2`

Example 2:

Input: `n = 3, trust = [[1,3],[2,3]]`
Output: `3`

Example 3:

Input: `n = 3, trust = [[1,3],[2,3],[3,1]]`
Output: `-1`

Constraints:

- `1 <= n <= 1000`
- `0 <= trust.length <= 104`
- `trust[i].length == 2`
- All the pairs of `trust` are **unique**.
- `ai != bi`
- `1 <= ai, bi <= n`