5636. Number Of Ways To Reconstruct A Tree

My Submissions (/contest/biweekly-contest-43/problems/number-of-ways-to-reconstruct-a-tree/submissions/)

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User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Hard

You are given an array `pairs`, where `pairs[i] = [x_i, y_i]`, and:

- There are no duplicates.
- `x_i < y_i`

Let `ways` be the number of rooted trees that satisfy the following conditions:

- The tree consists of nodes whose values appeared in `pairs`.
- A pair `[x_i, y_i]` exists in `pairs` **if and only if** `x_i` is an ancestor of `y_i` or `y_i` is an ancestor of `x_i`.
- **Note:** the tree does not have to be a binary tree.

Two ways are considered to be different if there is at least one node that has different parents in both ways.

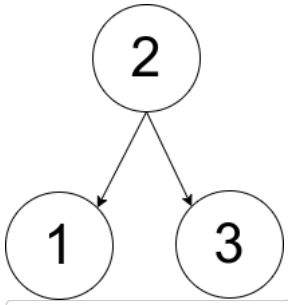
Return:

- `0` if `ways == 0`
- `1` if `ways == 1`
- `2` if `ways > 1`

A **rooted tree** is a tree that has a single root node, and all edges are oriented to be outgoing from the root.

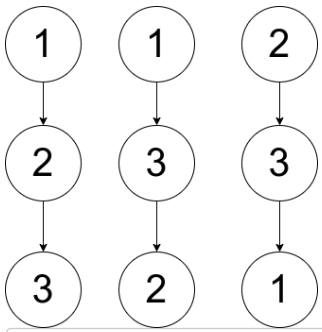
An **ancestor** of a node is any node on the path from the root to that node (excluding the node itself). The root has no ancestors.

Example 1:




```
Input: pairs = [[1,2],[2,3]]
Output: 1
Explanation: There is exactly one valid rooted tree, which is shown in the above figure.
```

Example 2:




```
Input: pairs = [[1,2],[2,3],[1,3]]
Output: 2
Explanation: There are multiple valid rooted trees. Three of them are shown in the above figures.
```

Example 3:

```
Input: pairs = [[1,2],[2,3],[2,4],[1,5]]
Output: 0
Explanation: There are no valid rooted trees.
```

Constraints:

- `1 <= pairs.length <= 10^5`
- `1 <= x_i < y_i <= 500`
- The elements in `pairs` are unique.

JavaScript

```
/**
 * @param {number[][]} pairs
 * @return {number}
 */
var checkWays = function(pairs) {

};
```

Custom Testcase Use Example Testcases

Run Submit