261. Graph Valid Tree Premium

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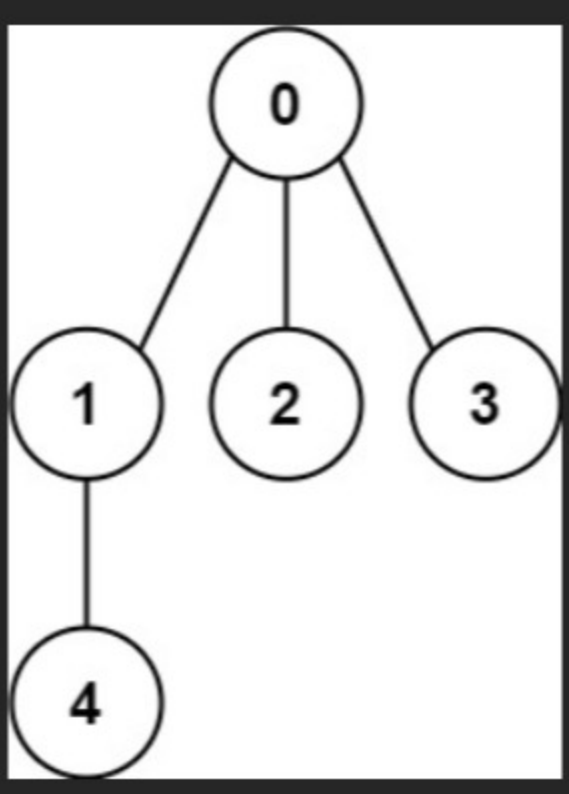
You have a graph of `n` nodes labeled from `0` to `n - 1`. You are given an integer n and a list of `edges` where `edges[i] = [a_i, b_i]` indicates that there is an undirected edge between nodes `a_i` and `b_i` in the graph.

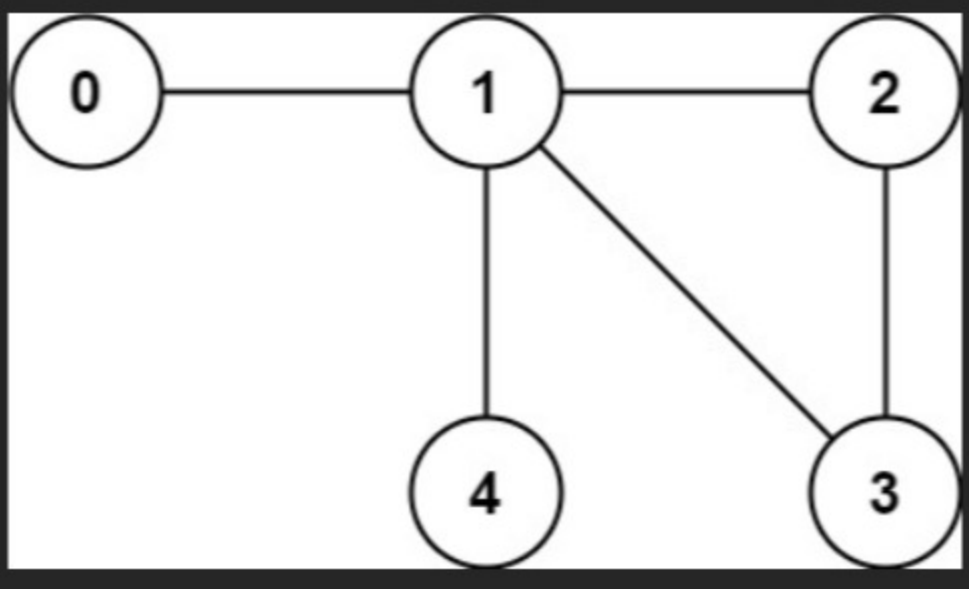
Return `true` *if the edges of the given graph make up a valid tree, and* `false` *otherwise.*

Example 1:




```
Input: n = 5, edges = [[0,1],[0,2],[0,3],[1,4]]
Output: true
```

Example 2:




```
Input: n = 5, edges = [[0,1],[1,2],[2,3],[1,3],[1,4]]
Output: false
```

Constraints:

- `1 <= n <= 2000`
- `0 <= edges.length <= 5000`
- `edges[i].length == 2`
- `0 <= a_i, b_i < n`
- `a_i != b_i`
- There are no self-loops or repeated edges.

Seen this question in a real interview before? 1/5

Yes No

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Hint 1

Given `n = 5` and `edges = [[0, 1], [1, 2], [3, 4]]`, what should your return? Is this case a valid tree?

Hint 2

According to the definition of tree on Wikipedia: "a tree is an undirected graph in which any two vertices are connected by *exactly* one path. In other words, any connected graph without simple cycles is a tree."

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