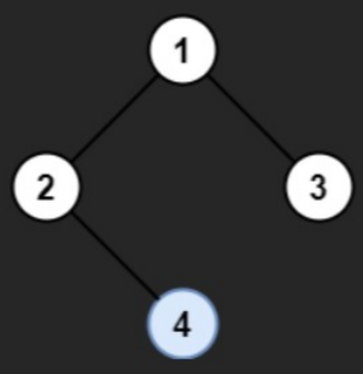
1469. Find All The Lonely Nodes Premium

Easy Topics Companies Hint

In a binary tree, a **lonely** node is a node that is the only child of its parent node. The root of the tree is not lonely because it does not have a parent node.

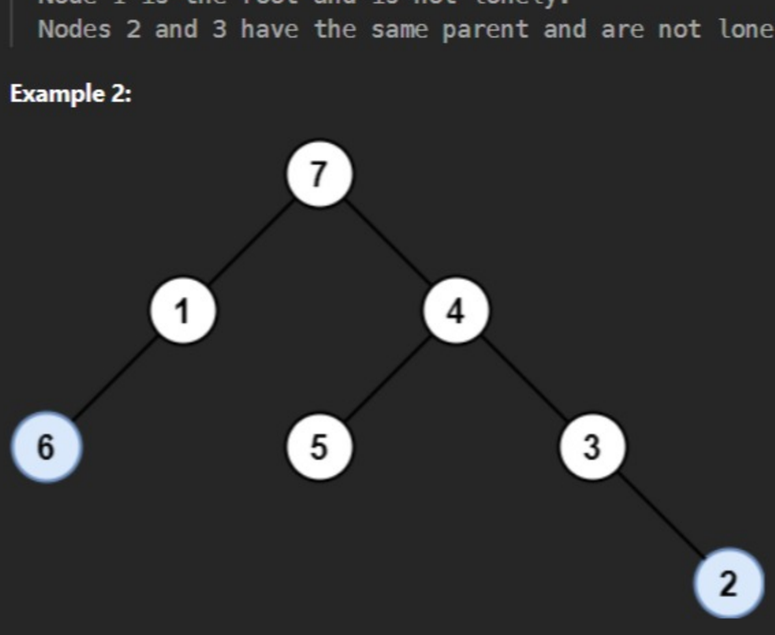
Given the `root` of a binary tree, return *an array containing the values of all lonely nodes* in the tree. Return the list **in any order**.

Example 1:



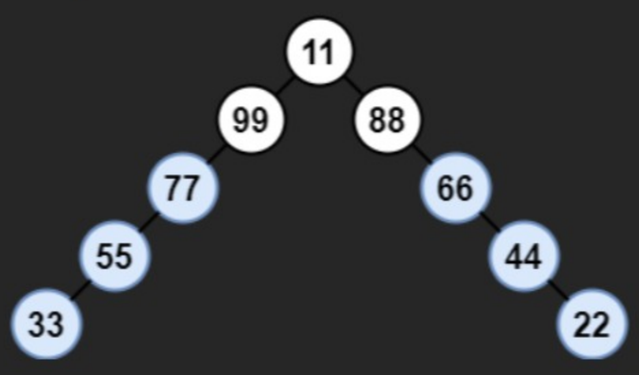

```
Input: root = [1,2,3,null,4]
Output: [4]
Explanation: Light blue node is the only lonely node.
Node 1 is the root and is not lonely.
Nodes 2 and 3 have the same parent and are not lonely.
```

Example 2:




```
Input: root = [7,1,4,6,null,5,3,null,null,null,null,null,2]
Output: [6,2]
Explanation: Light blue nodes are lonely nodes.
Please remember that order doesn't matter, [2,6] is also an acceptable answer.
```

Example 3:




```
Input: root = [11,99,88,77,null,null,66,55,null,null,44,33,null,null,22]
Output: [77,55,33,66,44,22]
Explanation: Nodes 99 and 88 share the same parent. Node 11 is the root.
All other nodes are lonely.
```

Constraints:

- The number of nodes in the `tree` is in the range `[1, 1000].`
- `1 <= Node.val <= 10^6`

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

Yes No

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Hint 1

Do a simple tree traversal, try to check if the current node is lonely or not.

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