## 1609. Even Odd Tree

Solved ⊗

A binary tree is named **Even-Odd** if it meets the following conditions:

- The root of the binary tree is at level index 0, its children are at level index 1, their children are at level index 2, etc.
- For every even-indexed level, all nodes at the level have odd integer values in **strictly increasing** order (from left to right).
- For every odd-indexed level, all nodes at the level have even integer values in **strictly decreasing** order (from left to right).

Given the root of a binary tree, return true if the binary tree is **Even-Odd**, otherwise return false.

```
/**
 * Definition for a binary tree node.
 * public class TreeNode {
      public var val: Int
     public var left: TreeNode?
     public var right: TreeNode?
      public init() { self.val = 0; self.left = nil; self.right =
nil; }
     public init( val: Int) { self.val = val; self.left = nil;
self.right = nil; }
      public init(_ val: Int, _ left: TreeNode?, _ right:
TreeNode?) {
          self.val = val
          self.left = left
          self.right = right
     }
 * }
 */
```

```
class Solution {
    func isEvenOddTree(_ root: TreeNode?) -> Bool {
        var level = 0
        var queue:[TreeNode?] = []
        queue.append(root)
        while(queue.isEmpty == false) {
            var previous = 0
            for in 0..<queue.count {</pre>
                let i = queue.removeFirst()!
                if(level % 2 == 0) {
                    if(i.val\%2 == 0) {
                        return false
                    }
                    if(previous != 0 && previous >= i.val) {
                       return false
                    }
                    previous = i.val
                } else {
                        if(i.val%2 == 1) {
                            return false
                         }
                    if(previous != 0 && previous <= i.val) {</pre>
                        return false
                    }
                    previous = i.val
                }
                if let left = i.left {
                    queue.append(left)
```