Given the root of a binary tree, the level of its root is 1, the level of its children is 2, and so on.

Return the **smallest** level x such that the sum of all the values of nodes at level x is **maximal**.

**Example 1:**

![](data:text/html; charset=UTF-8;base64,)

Input: root = [1,7,0,7,-8,null,null]  
Output: 2  
Explanation:   
Level 1 sum = 1.  
Level 2 sum = 7 + 0 = 7.  
Level 3 sum = 7 + -8 = -1.  
So we return the level with the maximum sum which is level 2.

**Example 2:**

Input: root = [989,null,10250,98693,-89388,null,null,null,-32127]  
Output: 2

**Constraints:**

* The number of nodes in the tree is in the range [1, 104].
* -105 <= Node.val <= 105