1080. Insufficient Nodes in Root to Leaf Paths

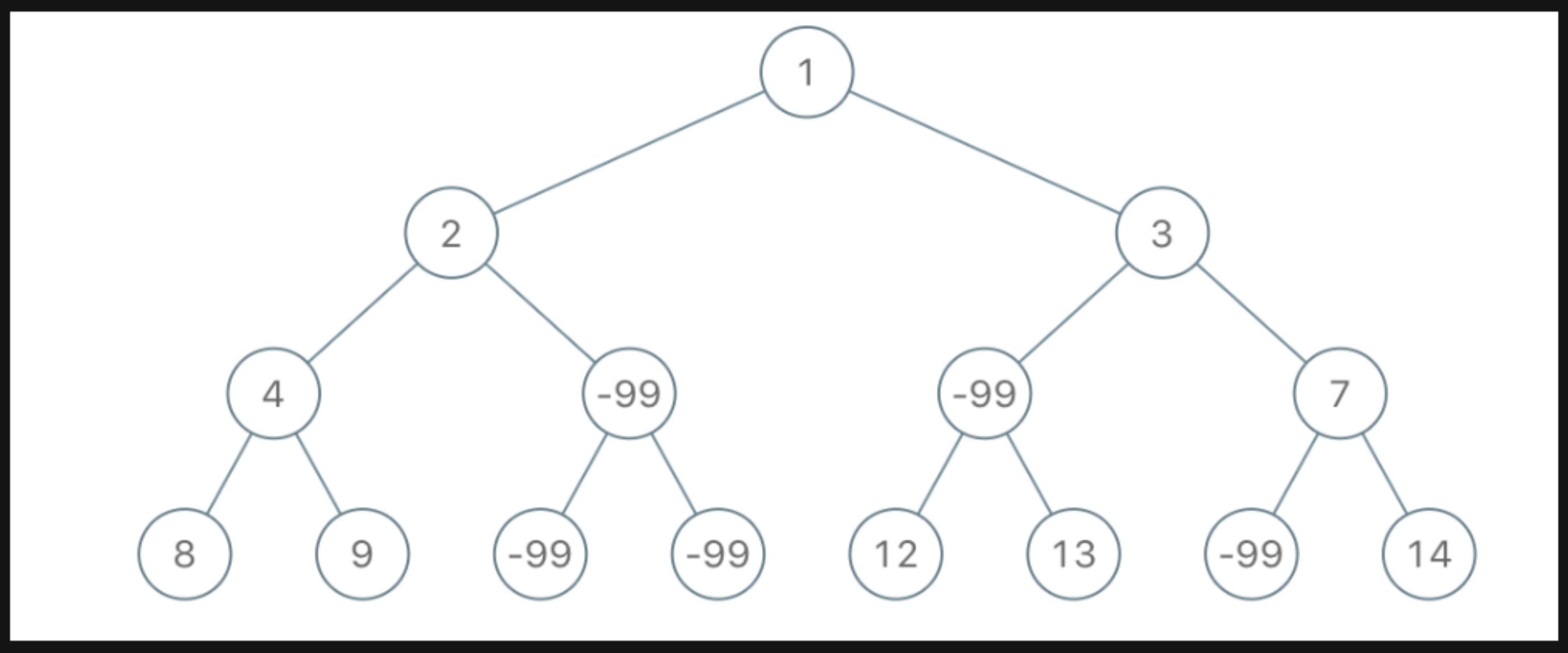
Description

Given the `root` of a binary tree and an integer `limit`, delete all **insufficient nodes** in the tree simultaneously, and return *the root of the resulting binary tree*.

A node is **insufficient** if every root to **leaf** path intersecting this node has a sum strictly less than `limit`.

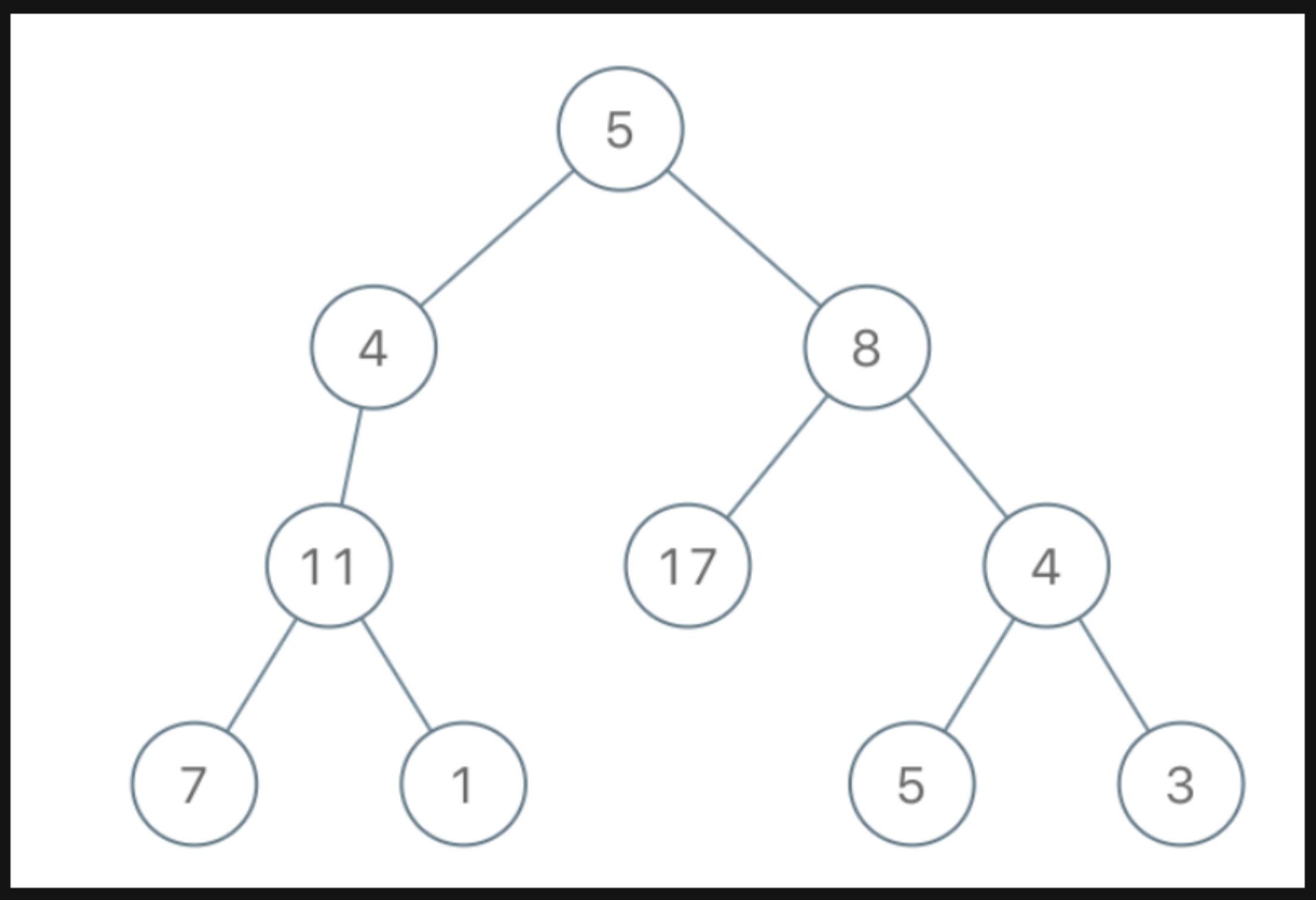
A **leaf** is a node with no children.

Example 1:



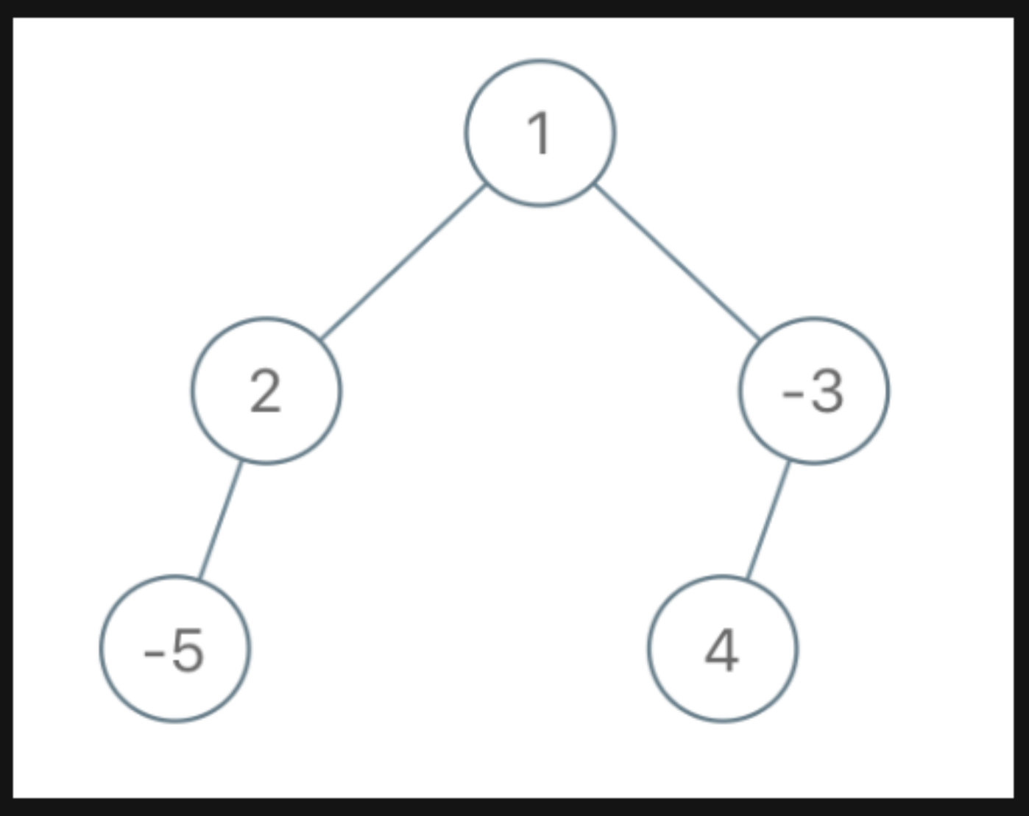
```
Input: root = [1,2,3,4,-99,-99,7,8,9,-99,-99,12,13,-99,14], limit = 1
Output: [1,2,3,4,null,null,7,8,9,null,14]
```

Example 2:



```
Input: root = [5,4,8,11,null,17,4,7,1,null,null,5,3], limit = 22
Output: [5,4,8,11,null,17,4,7,null,null,null,5]
```

Example 3:



```
Input: root = [1,2,-3,-5,null,4,null], limit = -1
Output: [1,null,-3,4]
```

Constraints:

- The number of nodes in the tree is in the range `[1, 5000]`.
- -10^{5} `<= Node.val <=` 10^{5}
- -10^{9} `<= limit <=` 10^{9}