

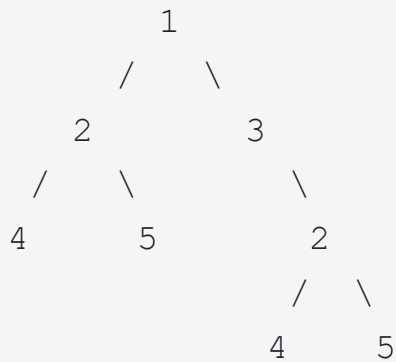
Duplicate subtree in Binary Tree

Given a binary tree, find out whether it contains a duplicate sub-tree of size two or more, or not.

Note: Two same leaf nodes are not considered as subtree as size of a leaf node is one.

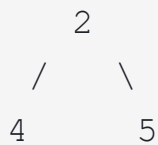
Example 1 :

Input :



Output : 1

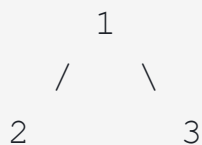
Explanation :



is the duplicate sub-tree.

Example 2 :

Input :



Output: 0

Explanation: There is no duplicate sub-tree in the given binary tree.

Your Task:

You don't need to read input or print anything. Your task is to complete the function **dupSub()** which takes root of the tree as the only argument and returns 1 if the binary tree contains a duplicate sub-tree of size two or more, else 0.

Expected Time Complexity: $O(N)$

Expected Space Complexity: $O(N)$

Constraints:

$0 \leq \text{Data of nodes} \leq 9$

$1 \leq \text{Number of nodes} \leq 10^5$