

이진 트리에서 두 노드 간 가장 긴 경로의 길이를 출력하라.

Input: root = [1,2,3,4,5]

Output: 3

Definition for a binary tree node.

class TreeNode:

def __init__(self, val=0, left=None, right=None):

self.val = val

self.left = left

self.right = right

1.dfs

class Solution:

result = 0

def diameterOfBinaryTree(self, root: TreeNode) -> int:

def checkDepth(node, depth):

if node == None:

return depth - 1

return max(checkDepth(node.left, depth + 1), checkDepth(node.right, depth + 1))

def check(node):

if node == None:

return

left = checkDepth(node.left, 1)

right = checkDepth(node.right, 1)

if self.result < left + right:

self.result = left + right

check(node.left)

check(node.right)

check(root)

return self.result

class Solution:

longest = 0

def diameterOfBinaryTree(self, root: TreeNode) -> int:

def dfs(node):

if not node:

return -1

left = dfs(node.left)

right = dfs(node.right)

self.longest = max(self.longest, left + right + 2)

return max(left, right) + 1

dfs(root)

return self.longest