

노드 개수와 무방향 그래프를 입력받아 트리가 최소 높이가 되는 루트의 목록을 리턴하라.

Input: n = 4, edges = [[1,0],[1,2],[1,3]]

Output: [1]

1.리프 노드 제거

import collections

class Solution:

def findMinHeightTrees(self, n: int, edges: List[List[int]]) -> List[int]:

if n <= 1:

return [0]

graph = collections.defaultdict(list)

for i, j in edges:

graph[i].append(j)

graph[j].append(i)

leaves=[]

for i in range(n):

if len(graph[i]) == 1:

leaves.append(i)

while n > 2:

n -= len(leaves)

new\_leaves = []

for leaf in leaves:

neighbor = graph[leaf].pop()

graph[neighbor].remove(leaf)

if len(graph[neighbor]) == 1:

new\_leaves.append(neighbor)

leaves = new\_leaves

return leaves