# 841. Keys and Rooms

There are n rooms labeled from 0 to n - 1 and all the rooms are locked except for room 0. Your goal is to visit all the rooms. However, you cannot enter a locked room without having its key.

When you visit a room, you may find a set of distinct keys in it. Each key has a number on it, denoting which room it unlocks, and you can take all of them with you to unlock the other rooms.

Given an array rooms where rooms[i] is the set of keys that you can obtain if you visited room i, return true if you can visit all the rooms, or false otherwise.

## SOLUTION IN C++

class Solution {

public boolean canVisitAllRooms(List<List<Integer>> rooms) {

int[] seen = new int[rooms.size()];

dfs(rooms, 0, seen);

return Arrays.stream(seen).allMatch(a -> a == 1);

}

private void dfs(List<List<Integer>> rooms, int node, int[] seen) {

seen[node] = 1;

for (final int child : rooms.get(node))

if (seen[child] == 0)

dfs(rooms, child, seen);

}

}