

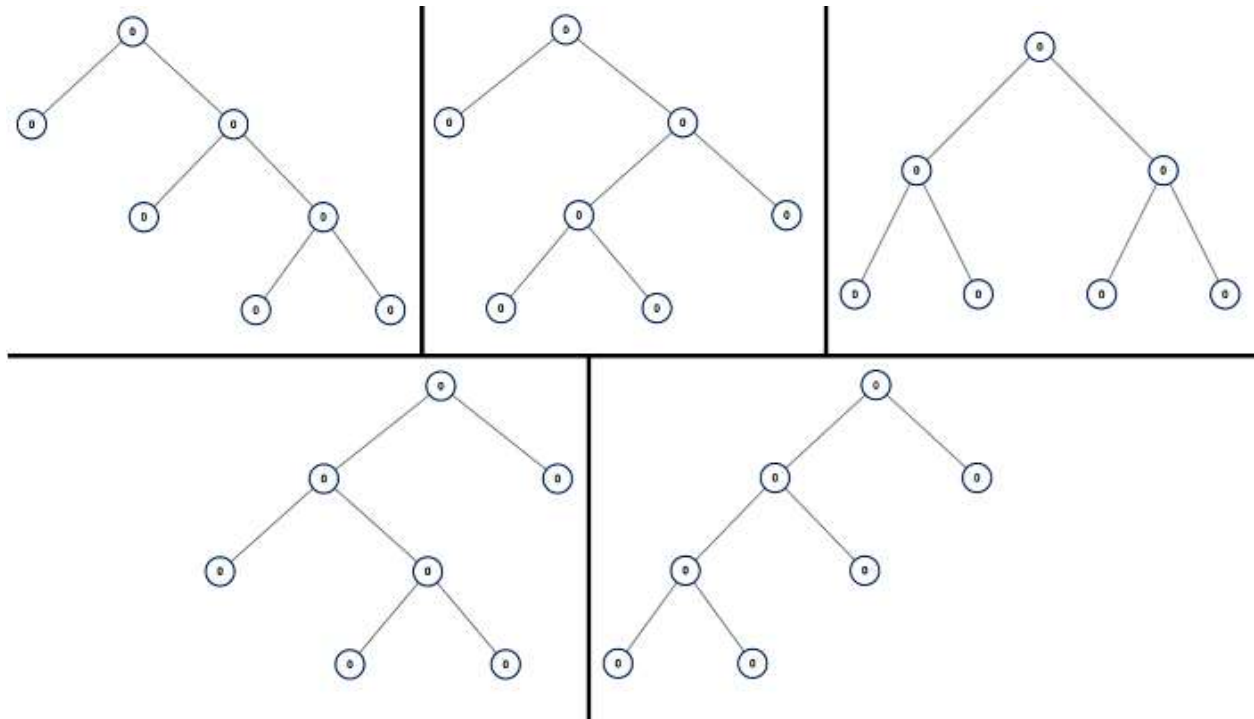
# All Possible Full Binary Trees

Given an integer  $n$ , return a list of all possible **full binary trees** with  $n$  nodes. Each node of each tree in the answer must have `Node.val == 0`.

Each element of the answer is the root node of one possible tree. You may return the final list of trees in **any order**.

A **full binary tree** is a binary tree where each node has exactly 0 or 2 children.

**Example 1:**



**Input:**  $n = 7$

**Output:**

`[[0,0,0,null,null,0,0,null,null,0,0],[0,0,0,null,null,0,0,0,0],[0,0,0,0,0,0,0,0],[0,0,0,0,0,null,null,null,null,0,0],[0,0,0,0,0,null,null,0,0]]`

**Example 2:**

**Input:**  $n = 3$

**Output:** `[[0,0,0]]`

**Constraints:**

- $1 \leq n \leq 20$