


Assignment Case	
CH1Special	
Periode Berlaku Semester Ganjil 2021/2022 Valid on Odd Semester Year 2021/2022	Software Laboratory Center Assistant Recruitment 22-1

Soal

Case

Maximum Depth of Binary Tree

Given a binary tree, you need to find the **deepest level** of that tree.

Input

The program will ask for **n**, and then followed by **n-integers nodes**.

Constraint

$$1 \leq n \leq 10000$$

$$0 \leq \text{nodes}[i] \leq 100$$

0 means there isn't any node there.

Output

Print the **maximum depth** of the **binary tree**.

Example (Print out one '\n' at the end of the results)

Input	Output
7 3 9 20 0 0 15 7	3
3 1 0 2	2

Explanation

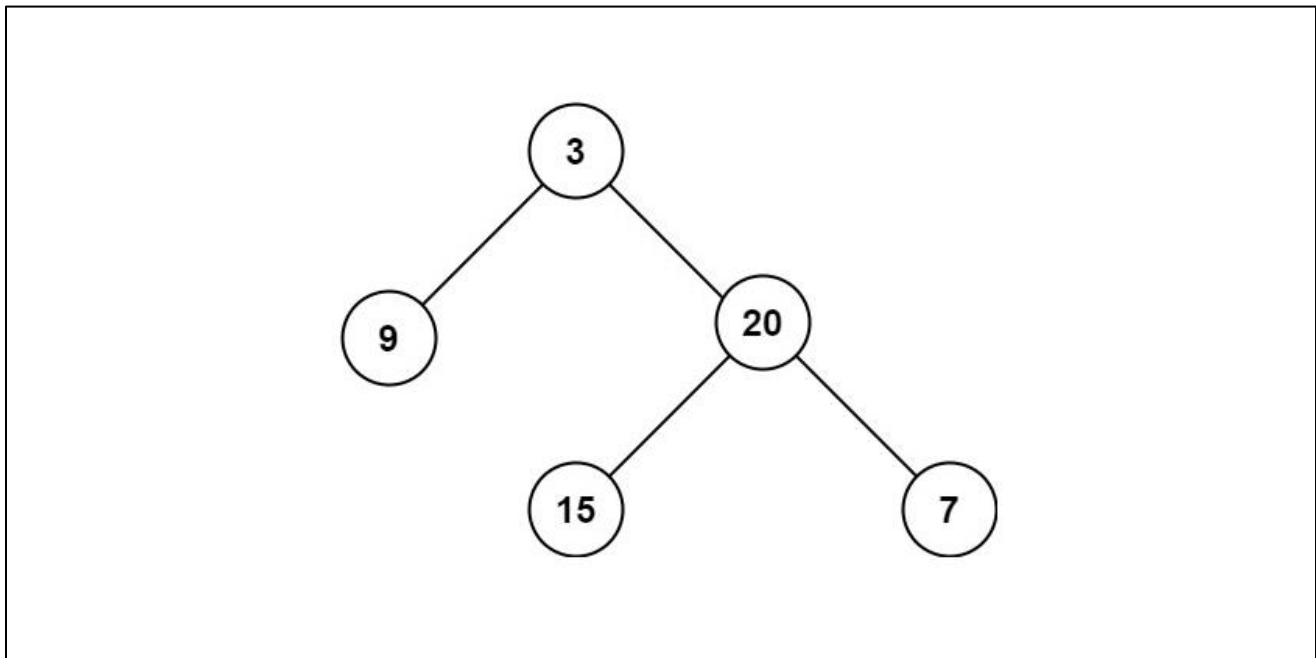


Figure 1. First Test Case

The zeroes means that there are no nodes at that position. You have to figure out how to make all the numbers into a binary tree, or another formula to find the child and the parent of the nodes.