

Problem 559: Maximum Depth of N-ary Tree

Problem Information

Difficulty: Easy

Acceptance Rate: 73.28%

Paid Only: No

Tags: Tree, Depth-First Search, Breadth-First Search

Problem Description

Given a n-ary tree, find its maximum depth.

The maximum depth is the number of nodes along the longest path from the root node down to the farthest leaf node.

N-ary-Tree input serialization is represented in their level order traversal, each group of children is separated by the null value (See examples).

Example 1:

Input: root = [1,null,3,2,4,null,5,6] **Output:** 3

Example 2:

Input: root = [1,null,2,3,4,5,null,null,6,7,null,8,null,9,10,null,null,11,null,12,null,13,null,null,14] **Output:** 5

Constraints:

* The total number of nodes is in the range `[0, 104]`. * The depth of the n-ary tree is less than or equal to `1000`.

Code Snippets

C++:

```
/*
// Definition for a Node.
class Node {
public:
    int val;
    vector<Node*> children;

    Node() {}

    Node(int _val) {
        val = _val;
    }

    Node(int _val, vector<Node*> _children) {
        val = _val;
        children = _children;
    }
};

class Solution {
public:
    int maxDepth(Node* root) {

    }
};
*/
```

Java:

```
/*
// Definition for a Node.
class Node {
    public int val;
    public List<Node> children;

    public Node() {}
}
```

```

public Node(int _val) {
    val = _val;
}

public Node(int _val, List<Node> _children) {
    val = _val;
    children = _children;
}
};

/*
class Solution {
public int maxDepth(Node root) {
    }
}

```

Python3:

```

"""
# Definition for a Node.
class Node:
    def __init__(self, val: Optional[int] = None, children: Optional[List['Node']] = None):
        self.val = val
        self.children = children
"""

class Solution:
    def maxDepth(self, root: 'Node') -> int:

```