

Maximum Depth of Binary Tree

Try to solve the Maximum Depth of Binary Tree problem.

We'll cover the following ^

- Statement
- Examples
- Understand the problem
- Figure it out!
- Try it yourself

Statement

Given the root of a binary tree, return its maximum depth. A binary tree's maximum depth is the number of nodes along the longest path from the root node down to the farthest leaf node.

Constraints:

- The number of nodes in the tree is in the range $[0, 10^4]$.
- $-100 \leq \text{node.data} \leq 100$

Examples

Sample example 1

Input

n	3	9	10	NULL	NULL	5	6
---	---	---	----	------	------	---	---

3

9

10

5

6

Output

3

1 of 2

Understand the problem

Let's take a moment to make sure you've correctly understood the problem. The quiz below helps you check if you're solving the correct problem:

Maximum Depth of Binary Tree

1

What is the maximum depth of the following tree?

root = [1, 2, 3, 4, 5, NULL, NULL]

A) 7

B) 3

C) 2

D) 4

Submit Answer



Question 1 of 2
0 attempted



Reset Quiz ↺

Figure it out!

We have a game for you to play. Rearrange the logical building blocks to develop a clearer understanding of how to solve this problem.

Note: As an additional challenge, we have intentionally hidden the solution to this puzzle.



Drag and drop the cards to rearrange them in the correct sequence.

If the current node is NULL,
return the counter.

Initialize a counter to track
the maximum depth seen so
far and a counter for the
depth of the current branch.

If the depth of the current
branch exceeds the maximum



depth seen so far, update the maximum depth.

Else, if the current node exists, check the depth of the left subtree and the depth of the right subtree.

Compare the depths of the left and right subtrees, and select the greater of the two. Add 1 and update this as the depth of this branch.

When all branches have been explored, return the maximum depth seen so far.

Reset

Submit

Try it yourself

Implement your solution in `main.java` in the following coding playground.

Note: We have left the solution to this challenge as an exercise for you. You may try to translate the logic of the solved puzzle into a coded solution.

Java



usercode > main.java

```
1 // Definiton of a binary tree node class
```

```
5 //     TreeNode<T> right;
6
7 //     TreeNode(T data) {
8 //         this.data = data;
9 //         this.left = null;
10 //         this.right = null;
11 //     }
12 // }
13
14 import java.util.*;
15 import ds_v1.BinaryTree.TreeNode;
16
17 public class Main{
18     public static int maxDepth(TreeNode<Integer> root) {
19
20         // Your code will replace the placeholder return statement.
21         return 0;
22     }
23 }
```





Submit

Test Cases Results

Case 1

Case 2

Case 3

Input #1

[9,7,20,3,15]

Maximum Depth of Binary Tree

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Next →

Solution: Binary Tree ...

Tree Breadth-first Sea...



Mark as
Completed

