# Diameter of Binary Tree (/problems/diameter-of-binary-tree/)

# **Submission Detail**

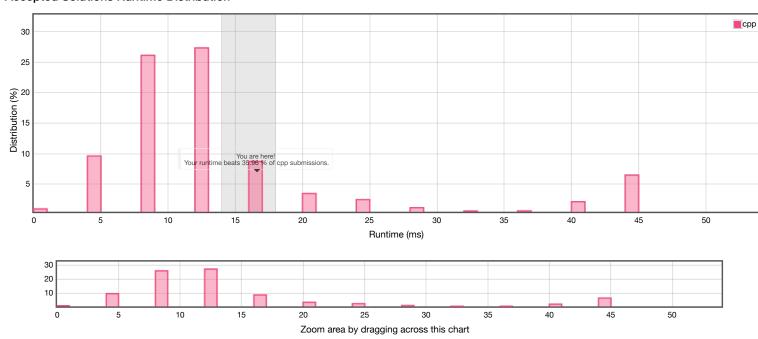
106 / 106 test cases passed.

Status: Accepted

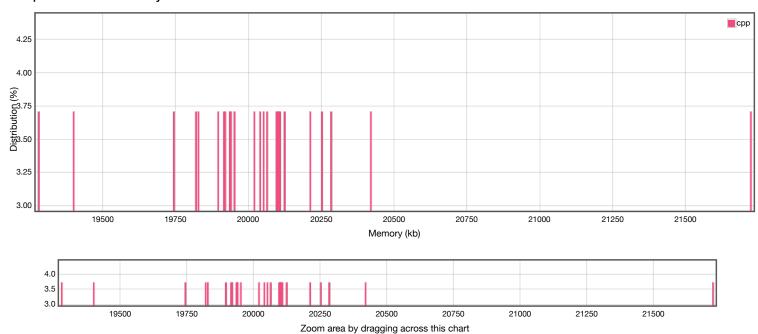
Runtime: **16 ms** Memory Usage: **17.1 MB** 

Submitted: 23 hours, 41 minutes ago

### **Accepted Solutions Runtime Distribution**



### **Accepted Solutions Memory Distribution**



Invite friends to challenge Diameter of Binary Tree

#### Submitted Code: 23 hours, 41 minutes ago

Language: cpp

Edit Code

```
1
     * Definition for a binary tree node.
 2
     * struct TreeNode {
 3
 4
           int val;
 5
           TreeNode *left;
 6
           TreeNode *right;
 7
           TreeNode(int x) : val(x), left(NULL), right(NULL) {}
     * };
 8
    */
 9
   class Solution {
10
    public:
11
12
        int ans;
13
14
        int diameterOfBinaryTree(TreeNode* root) {
15
            ans = 1;
            depth(root);
16
17
            return ans - 1;
18
        }
19
        int depth(TreeNode* node) {
20
            if (node == NULL) {return 0;}
21
22
            int L = depth(node->left);
23
            int R = depth(node->right);
24
            ans = max(ans, L+R+1);
25
            return max(L, R) + 1;
26
        }
27
28
        int max(int a, int b) {
            if (a == b \text{ or } a > b)
29
30
                return a;
31
            return b;
32
        }
33 };
```

Back to problem (/problems/diameter-of-binary-tree/)

Copyright © 2020 LeetCode

Help Center (/support/) | Jobs (/jobs/) | Bug Bounty (/bugbounty/) | Terms (/terms/) | Privacy Policy (/privacy/) 

\$\bigsup \text{United} \text{United} \text{States} \text{(/region/)}