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

Submission Detail

106 / 106 test cases passed.

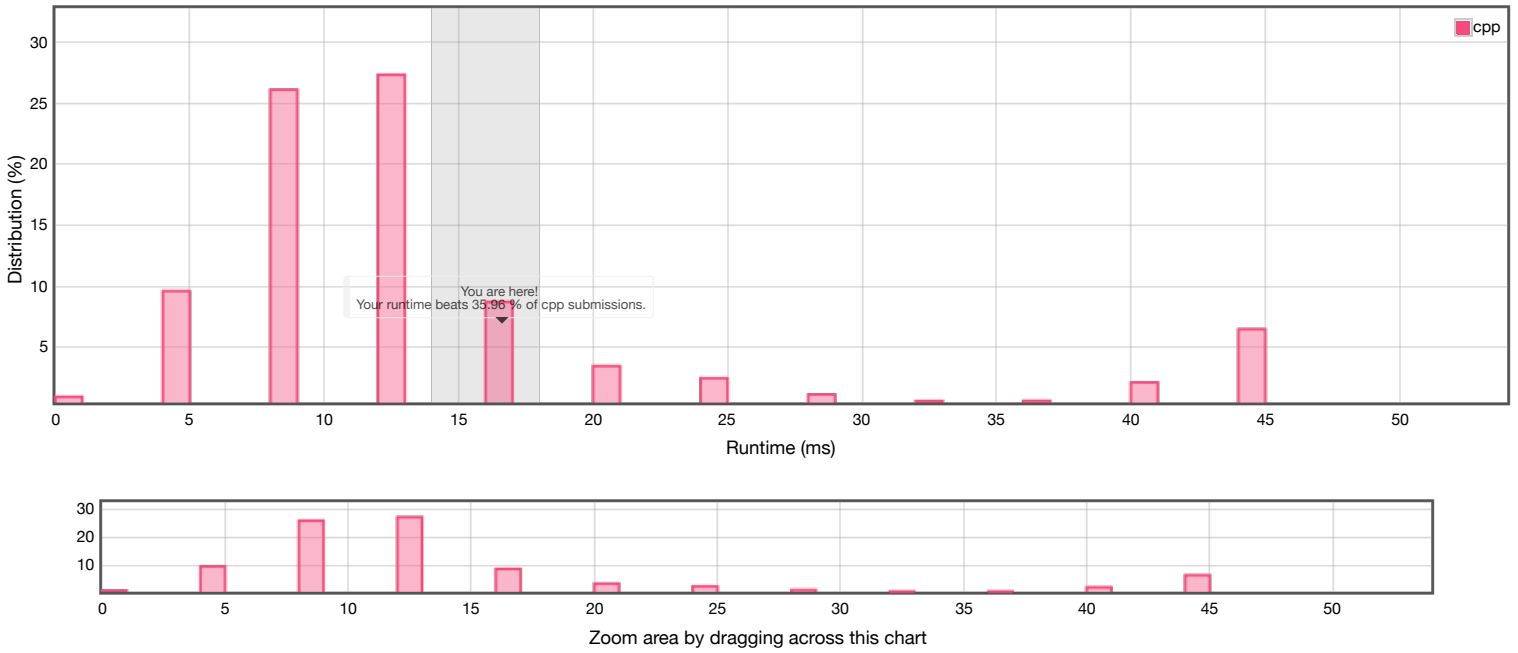
Status: Accepted

Runtime: **16 ms**

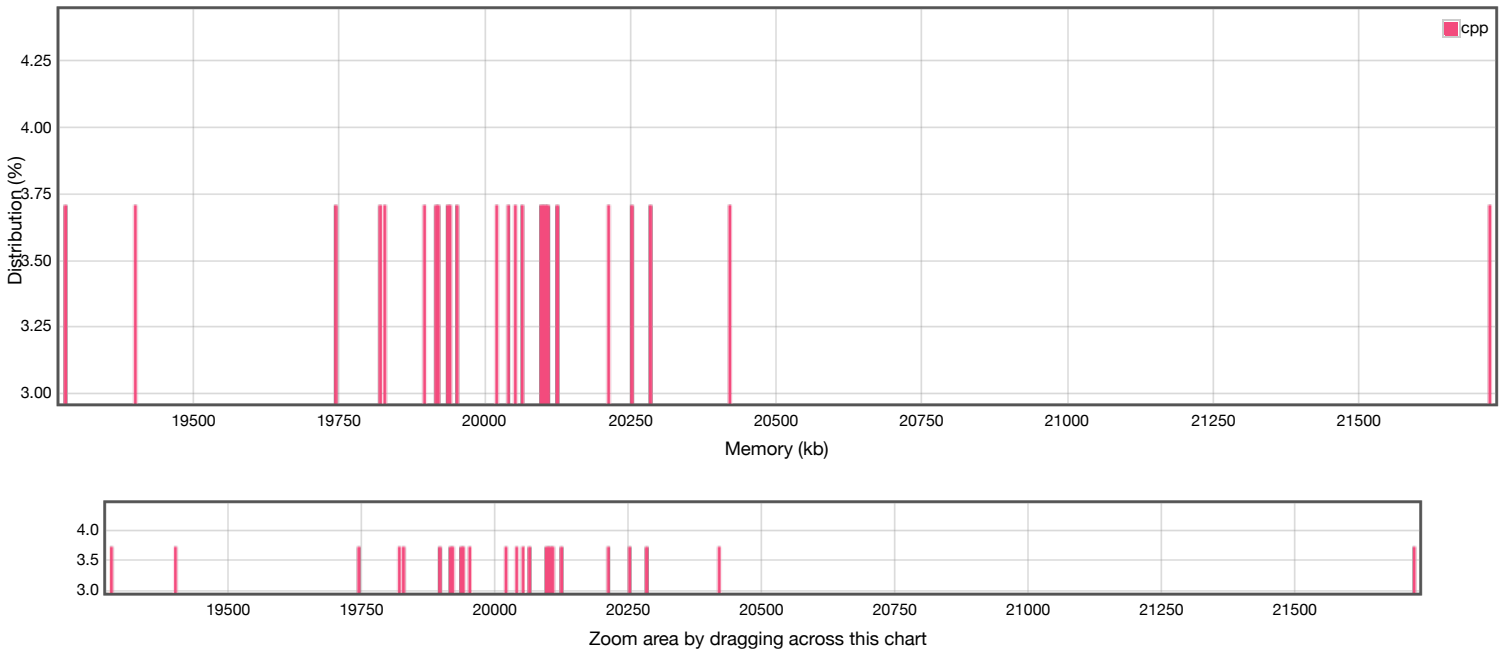
Memory Usage: **17.1 MB**

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

```cpp
/**
 * Definition for a binary tree node.
 * struct TreeNode {
 *     int val;
 *     TreeNode *left;
 *     TreeNode *right;
 *     TreeNode(int x) : val(x), left(NULL), right(NULL) {}
 * };
 */
class Solution {
public:
    int ans;

    int diameterOfBinaryTree(TreeNode* root) {
        ans = 1;
        depth(root);
        return ans - 1;
    }

    int depth(TreeNode* node) {
        if (node == NULL) {return 0;}
        int L = depth(node->left);
        int R = depth(node->right);
        ans = max(ans, L+R+1);
        return max(L, R) + 1;
    }

    int max(int a, int b) {
        if (a == b or a > b)
            return a;
        return b;
    }
};
```

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