AlgoExpert Quad Layout C++ 12px Sublime Monok

Prompt Scratchpad Our Solution(s) Video Explanation Run Code

Solution 1 Solution 2

```
1
     // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
 2
 3
     using namespace std;
 4
 5 ▼ class BinaryTree {
     public:
 6
 7
       int value;
       BinaryTree *left;
9
       BinaryTree *right;
10
11 ▼ BinaryTree(int value) {
         this->value = value;
12
13
         left = NULL;
         right = NULL;
14
15
16
     };
17
18
     \ensuremath{//} Average case: when the tree is balanced
19
     // O(n) time \mid O(h) space - where n is the number of nodes in
     // the Binary Tree and h is the height of the Binary Tree
21 ▼ int nodeDepths(BinaryTree *root, int depth = 0) {
      if (root == NULL)
22
23
         return 0;
      return depth + nodeDepths(root->left, depth + 1) +
25
              nodeDepths(root->right, depth + 1);
26
```