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1  /*Author: Bochen (mddboc@foxmail.com)
2  Last Modified: Tue Apr 10 22:28:44 CST 2018*/
3
4  /*
5  Given a binary tree, find its maximum depth.
6
7  ..... The maximum depth is the number of nodes along the longest path from the
           root node down to the farthest leaf node.
8
9  ..... For example:
10 ..... Given binary tree [3,9,20,null,null,15,7],
11
12 ..... 3
13 ..... / \
14 ..... 9  20
15 ..... /  \
16 ..... 15  7
17 ..... return its depth = 3.*/
18
19
20 import java.util.*;
21 import java.lang.Math;
22 import java.lang.System;
23 import java.lang.Integer;
24
25
26 public class Main {
27
28     .... public static void main(String[] args) throws ArithmeticException {
29
30         .... String input = "ab";
31
32         .... boolean answer = new Solution().repeatedSubstringPattern(input);
33
34         .... System.out.println("haha");
35     }
36
37 }
38
39
40 class ListNode {
41     .... int val;
42     .... ListNode next;
43
44     .... ListNode(int x) {
45         .... val = x;
46     }
47 }
48
49
50 class TreeNode {
51     .... int val;
52     .... TreeNode left;
53     .... TreeNode right;
54
55     .... TreeNode(int x) {
56         .... val = x;
57     }
58 }
59
60
61 class Solution {
62     .... public int maxDepth(TreeNode root) {
63
64         .... if (root == null) {
65             .... return 0;
66         }
67
68         .... if (root.left != null && root.right != null) {
69             .... return 1 + Math.max(maxDepth(root.left), maxDepth(root.right));
70         } else {
71             .... if (root.left != null) {
72                 .... return 1 + maxDepth(root.left);

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```
73 .....} else if (root.right != null) {  
74 .....    return 1 + maxDepth(root.right);  
75 .....} else {  
76 .....    return 1;  
77 .....}  
78 .....}  
79 .....}  
80 }
```