## 687. Longest Univalue Path

Given a binary tree, find the length of the longest path where each node in the path has the same value. This path may or may not pass through the root.

Note: The length of path between two nodes is represented by the number of edges between them.

## Example 1:

Input:



Output:

2

## Example 2:

Input:



Output:

2

Note: The given binary tree has not more than 10000 nodes. The height of the tree is not more than 1000.

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```
Difficulty: Easy
 Total Accepted:4.7K
 Total Submissions:14.3K
 Contributor: 1337c0d3r
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/**
 * 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 helper(TreeNode* root,int val)
   {
       if(!root || root->val!=val) return 0;
       return 1+max(helper(root->left,val),helper(root->right,val));
```

}

int longestUnivaluePath(TreeNode\* root) {

if(!root) return 0;

```
int sub = max(longestUnivaluePath(root->left),longestUnivaluePath(root->right));
    return max(sub,helper(root->left,root->val)+helper(root->right,root->val));
    }
};
```