Number of Visible Nodes

There is a binary tree with N nodes. You are viewing the tree from its left side and can see only the leftmost nodes at each level. Return the number of visible nodes.

Note: You can see only the leftmost nodes, but that doesn't mean they have to be left nodes. The leftmost node at a level could be a right node.

Signature

```
int visibleNodes(Node root) {
```

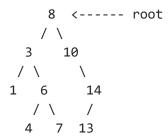
Input

The root node of a tree, where the number of nodes is between 1 and 1000, and the value of each node is between 0 and 1,000,000,000

Output

An int representing the number of visible nodes.

Example



output = 4