The height of a binary tree is the number of edges between the tree's root and its furthest leaf. For example, the following binary tree is of height 2:

Function Description

Complete the `getHeight` or `height` function in the editor. It must return the height of a binary tree as an integer.

`getHeight` or `height` has the following parameter(s):

- `root`: a reference to the root of a binary tree.

**Note** - The height of binary tree with single node is taken as zero.

**Input Format**

The first line contains an integer `n`, the number of nodes in the tree.
Next line contains `n` space separated integer where `ith` integer denotes `node[i].data`.

**Note**: Node values are inserted into a binary search tree before a reference to the tree's root node is passed to your function. In a binary search tree, all nodes on the left branch of a node are less than the node value. All values on the right branch are greater than the node value.

**Constraints**

1 ≤ `node. data[i]` ≤ 20
1 ≤ `n` ≤ 20

**Output Format**

Your function should return a single integer denoting the height of the binary tree.

**Sample Input**
Sample Output

3

Explanation

The longest root-to-leaf path is shown below:

There are 4 nodes in this path that are connected by 3 edges, meaning our binary tree's $height = 3$. 