

Day 22: Binary Search Trees

Welcome to Day 22! Check out [a video review of binary search trees and heaps here](#), or just jump right into the problem.

The height of a binary tree is the number of nodes on the largest path from root to any leaf. You are given a pointer *root* pointing to the root of a binary search tree. Return the height of the tree. You only have to complete the function *getHeight* given in the editor.

Input Format

First line contains *T*, the number of test cases. Next *T* lines contain an integer *data* to be added to the binary search tree.

Output Format

Output the height of the binary search tree.

Sample Input

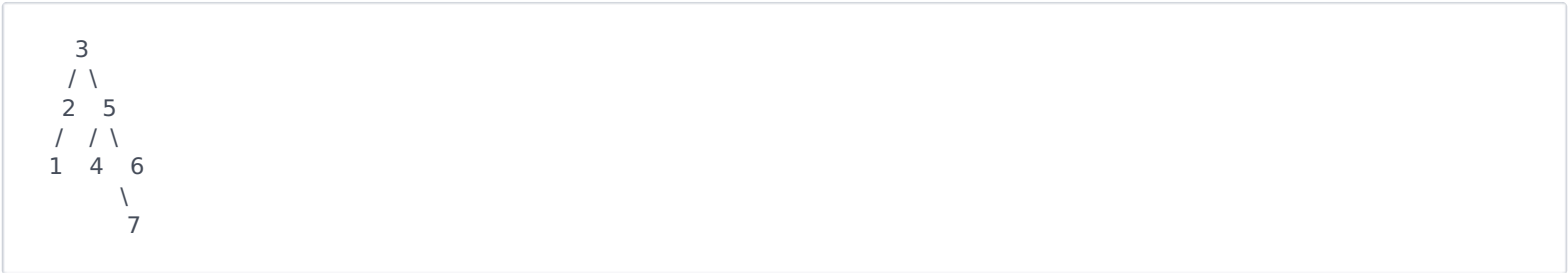
```
7
3
5
2
1
4
6
7
```

Sample Output

```
4
```

Explanation

The Binary Search tree formed with the given values is



The maximum length root to leaf path is 3->5->6->7. There are 4 nodes in this path. Therefore the height of the binary tree = 4.