

Find number of Balanced Binary Tree Violations

You are given a binary tree. You need count the number of balanced binary tree violations in the given tree

Input Format

N - number of nodes N space separated values for each node

Constraints

$1 \leq N \leq 10000$

Output Format

Print the number of balanced binary tree violations

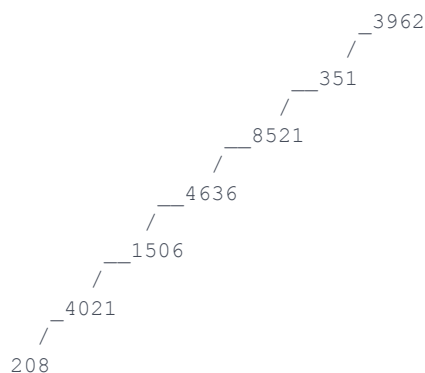
Sample Input 0

```
7
3962 351 8521 4636 1506 4021 208
1 2 -1
2 3 -1
3 4 -1
4 5 -1
5 6 -1
6 7 -1
7 -1 -1
```

Sample Output 0

```
5
```

Explanation 0



This is a skewed tree. This has balanced binary tree violations in every level except leaf node and parent of leaf node.

Sample Input 1

```
5
3085 3540 5529 4007 5584
1 2 3
2 4 5
3 -1 -1
4 -1 -1
5 -1 -1
```

Sample Output 1

0

Sample Input 2

```
10
7876 8649 8956 8968 3311 4131 7125 7388 707 8139
1 2 3
2 4 5
3 6 7
4 8 9
5 10 -1
6 -1 -1
7 -1 -1
8 -1 -1
9 -1 -1
10 -1 -1
```

Sample Output 2

0