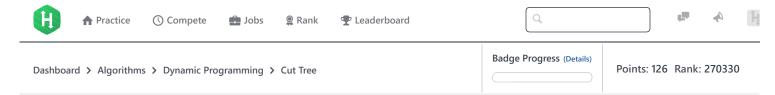
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Problem Submissions Leaderboard Discussions Editorial

Given a tree T with n nodes, how many subtrees (T) of T have at most K edges connected to (T - T)?

## **Input Format**

The first line contains two integers n and K followed by n-1 lines each containing two integers a & b denoting that there's an edge between a & b.

#### **Constraints**

1 <= K <= n <= 50

Every node is indicated by a distinct number from 1 to n.

#### **Output Format**

A single integer which denotes the number of possible subtrees.

## **Sample Input**

- 3 1
- 2 1
- 2 3

## **Sample Output**

6

# **Explanation**

There are 2<sup>3</sup> possible sub-trees:

 $\{\}\ \{1\}\ \{2\}\ \{3\}\ \{1,\ 2\}\ \{1,\ 3\}\ \{2,\ 3\}\ \{1,\ 2,\ 3\}$ 

#### But:

the sub-trees {2} and {1,3} are not valid. {2} isn't valid because it has 2 edges connecting to it's complement {1,3} whereas K = 1 in the sample test-case {1,3} isn't valid because, well, it's not a sub-tree. The nodes aren't connected.

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Submissions: 888

Max Score:40 Difficulty: Medium

More

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```
Java 7
 1 ▼ import java.io.*;
 2 import java.util.*;
 3 import java.text.*;
 4 import java.math.*;
   import java.util.regex.*;
 5
 6
 7 ▼ public class Solution {
 8
        public static void main(String[] args) {
 9 ₹
            /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be named Solution. */
10 ▼
11
12 }
                                                                                                                  Line: 1 Col: 1
1 Upload Code as File
                     Test against custom input
                                                                                                      Run Code
                                                                                                                   Submit Code
```

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