

[All Tracks](#) > [Data Structures](#) > [Trees](#) > > Problem

10



LIVE EVENTS

Mirror Image

Attempted by: **56** / Accuracy: **61%** / Maximum Score: **10** / ★★★★★ 0 Votes

Tag(s): Very-Easy

PROBLEM**EDITORIAL****MY SUBMISSIONS**

You are given a binary tree rooted at 1. You have to find the mirror image of any node q_i about node 1. If it doesn't exist then print -1.

Input:

First line of input is N and Q.

Next N-1 line consists of two integers and one character first of whose is parent node , second is child node and character "L" representing Left child and "R" representing right child.

Next Q lines represents q_i .

Output:

For each q_i print it mirror node if it exists else print -1.

NOTE: 1 is mirror image of itself.

Constraints:

 $1 \leq N \leq 10^3$ $1 \leq Q \leq 10^3$

SAMPLE INPUT



```
10 8
1 2 R
1 3 L
2 4 R
2 5 L
3 6 R
3 7 L
5 8 R
5 9 L
7 10 R
2
5
3
6
1
10
9
4
```

SAMPLE OUTPUT



```
3
6
2
5
1
-1
-1
7
```

10

LIVE EVENTS

Time Limit: 1.0 sec(s) for each input file.**Memory Limit:** 256 MB**Source Limit:** 1024 KB**Marking Scheme:** Marks are awarded when all the testcases pass.**Allowed Languages:** C, C++, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, JavaScript(Rhino), JavaScript(Node.js), Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, R(RScript), Racket, Ruby, Rust, Scala, Scala 2.11.8, Swift, Visual Basic

CODE EDITOR

Enter your code or [Upload your code](#) as file.

Save

C (gcc 4.8.2) ▼



```
1 #include <stdio.h>
2
3 int main()
4 {
5     printf("Hello World!\n");
6     return 0;
7 }
8
```

1:1

☒ Provide custom input

COMPILE & TEST

SUBMIT

Press Ctrl-space for autocomplete suggestions.

POWERED BY code table