

## 标签 树链剖分 下的文章

🏠 首页 (<https://blog.orzsiyuan.com/>) / 树链剖分

「Codeforces 1174F」Ehab and the Big Finale  
(<https://blog.orzsiyuan.com/archives/Codeforces-1174F-Ehab-and-the-Big-Finale/>)

题目链接: Codeforces 1174F (<https://codeforces.com/problemset/problem/1174/F>)

这是一道交互题。

给定一棵有  $n$  个点的树，节点 1 为根节点。

我们选择一个隐藏节点  $x$ ，你需要进行以下三种操作来找到这个节点  $x$  的编号。

- $d\ u$  : 你会得到节点  $u$  和  $x$  之间的距离。两个节点之间的距离定义为最短路径上的边数。
- $s\ u$  : 你会得到节点  $u$  到  $x$  的最短路径上的第二个节点。但是如果  $u$  不是  $x$  的祖先，你会直接得到 Wrong answer 的结果!
- $!\ u$  : 回答隐藏节点  $x$  的编号为  $u$ 。

你需要在 36 次询问（不包括回答）内找到  $x$  的编号。这个隐藏节点  $x$  不会根据你的询问而改变。

数据范围:  $2 \leq n \leq 2 \times 10^5$ 。

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「CSP 2019」算法模板复习 (<https://blog.orzsiyuan.com/archives/hehezhou-AK-CSP-2019/>)  
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