GeeksforGeeks Practice

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GeeksforGeeks

BETA

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Contest Closed
There is a 10% penalty for each wrong submission.

Betrayed by friends

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Rahul recently broke up with his girlfriend and he told this to some of his best friends. He didn't want anybody else to know about it.
The next day he went to his college and found that everybody knew about his break up. Now, he wants to find all those persons who whispered the information to another. You need to help Rahul in this work. You will be given N-1 pairs in {u, v} form, where each pair depicts that u leaked the information to v.
You will also be given Q number of queries, each query comprises of a pair of integers in form {a, b}, and you have to tell who was the one among a and b that first leaked the information to anyone.

Input:
The first line of input contains an integer T denoting the number of test cases. Then T test cases follow. Each test case consists of four lines. First line of each test case contains an integer N denoting the number of students in the class. Second line of each test case contains (N-1) pairs of integers where each pair is in {u, v} form which depicts that student u leaked information to student v. Third line of each test case contains an integer Q denoting the number of queries. Fourth line of each test case contains Q pairs of integers where each pair is in {a, b} form.

Output:
Corresponding to each test case, there will be Q queries, you need to print the answer to each query in a same line separated by a space, print -1 if answer to a query is not possible.

Constraints:
$1 <= T <= 1000$
$1 \le N, Q \le 1000$
$1 \le a, b, u, v \le N$

Example:
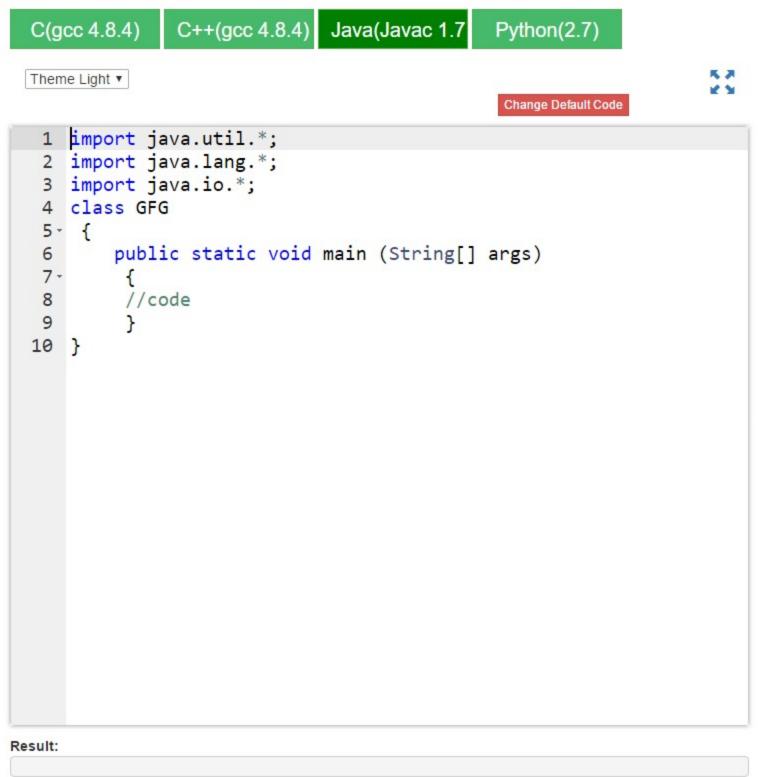**Input:**
1
5
1 2 3 4 2 5 2 3
3
1 3 4 2 3 5
Output:
1 2 -1

Explanation:
1) among 1 and 3, 1 betrayed first
2) among 4 and 2, 2 betrayed first
3) can't decide between the two, hence -1

Author: Shubham Joshi 1

| C(gcc 4.8.4) | C++(gcc 4.8.4) | Java(Javac 1.7) | Python(2.7) |

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Change Default Code

```java
import java.util.*;
import java.lang.*;
import java.io.*;
class GFG
 {
	public static void main (String[] args)
	 {
	 //code
	 }
 }
```

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Result:

Submit   Test   Editorial

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