



Inter University Programming Contest

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Gotham's Reckoning

Max. Score: 100

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Problem Statement

Gotham is connected to various cities around it. The connected cities have police links between them. As Bane is taking control of Gotham, he wants to destroy these police communication links. If he breaks a link between two cities and they still remain connected, Police from other city will come to Gotham and challenge his control. Bane finds a blueprint of these communication links and removes the links which are safe (that links which if removed will not notify the police) to destroy.

Gordon finds out that Bane has destroyed links but still some links may be connected, so he gives emergency signal and linked cities starts sending Police to Gotham.

Bane has to find total number of cities which will send police to Gotham.

All the cities are given a unique id from 0 to $p-1$ (including Gotham), p is the total number of cities.

Input : The first line contains an integer ' t ' the number of test cases. Then t test cases follow.

First line of each test case contains 2 integers p and l , where p is no of cities and l is total number of links between the cities. Then l lines follow, each line containing two space separated integers, the cities which are linked to each other. The next line contains the id of Gotham.

Output: Print a single integer for each test case, the total number of cities which will send police to Gotham.

Constraints:

$1 \leq t \leq 100$

$1 \leq p \leq 1000$

$1 \leq I \leq 1000000$

Sample Input ([Plaintext Link](#))

```
1
4 4
0 1
1 2
2 3
3 1
0
```

Sample Output ([Plaintext Link](#))

```
0
```

Time Limit: 1 sec(s) for each input file.

Memory Limit: 256 MB

Source Limit: 1024 KB

Scoring: Score is assigned when all testcases pass.

Allowed languages: C, C++, Clojure, Go, Haskell, C#, Java, Objective-C, Perl, PHP, Python, Ruby

[Load Code Editor](#) You can submit code after loading editor.

RECENT SUBMISSIONS



User	Result	Time	Lang
Abhinav ...	100	0.9121	C++
Rajat De...		2.3518	C++

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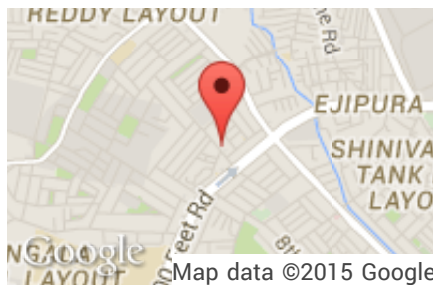
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