02 : 23 : 36 : 23
DAY HRS MIN SEC

Codathon - Inter NIT Coding Contest 2018

LIVE

Jan 15, 2018, 06:00 PM IST - Jan 22, 2018, 06:00 PM IST

DAY 5 - Burning bridges

Max. Marks: 100

You are given a map which contains N islands that are connected by M bridges. You are also given Q queries, each of which specify an island to be deleted. Once an island is deleted, all the bridges (if any) connected to the island are also deleted.

Write a program to find the number of pairs of islands that are no longer connected after each query is implemented.

Note:

For each new query, assume the initial unmodified map.

Input format

- First line: Two space-separated integers N and M
- Next M lines: Two space-separated integers A and B (denoting a bridge between A and B
- Next line: Q
- Next Q lines: Integer i denoting the island to be deleted

Output format

For each query, print the number of pairs of disconnected islands.

Constraints

$1 \leq N, Q \leq 10^5$
$1 \leq A, B \leq N$
$0 \leq M \leq max(10^5, N \cdot (N-1)/2)$

SAMPLE INPUT

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

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

SAMPLE OUTPUT

```
0
2
2
0
```

Explanation

For the 2^{nd} query, when Island 2 gets deleted, Island 1 cannot reach Island 3 and Island 4. Hence, the output is 2.

Participants are requested to keep themself updated with the announcements of the contest.

Time Limit:	1.0 sec(s) for each input file.
Memory Limit:	256 MB
Source Limit:	1024 KB
Marking Scheme:	Marks are awarded if any testcase passes.
Allowed Languages:	C, C++, C++14, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, JavaScript(Rhino), JavaScript(Node.js), Julia, Kotlin, Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, Racket, Ruby, Rust, Scala, Swift, Visual Basic

CODE EDITOR

Enter your code or Upload your code as file. Save C (gcc 5.4.0)

```
/*
// Sample code to perform I/O:

scanf("%s", name);              // Reading input from STDIN
printf("Hi, %s.\n", name);      // Writing output to STDOUT

// Warning: Printing unwanted or ill-formatted data to output will cause the tes
*/

// Write your code here

```

1:1

Provide custom input

Press Ctrl-space for autocomplete suggestions.

COMPILE & TEST SUBMIT

Tip: You can submit any number of times you want. Your best submission is considered for computing total score.

Your Rating: Like 0 Share Tweet