

GEBZE TECHNICAL UNIVERSITY
Department of Computer Engineering
CSE 222-Data Structures
2018-2019 Spring
HW #8
Due Date: 11.05. 2019 23:55

Description

We have a group of people in which an ordered popularity relation is defined between person pairs. If there exist a relation such that $(P1, P2)$ this means that A thinks that B is popular. The relation is transitive which means that if the relations $(P1, P2)$ and $(P2, P3)$ exist, then $(P1, P3)$ also exist even if it is not specified by the input pairs. You are supposed to write a Java program which finds the people who are considered popular by every other person.

Input (input.txt)

* Line 1: Two space-separated integers, N (number of people) and M (number of ordered relations)

* Lines 2..1+M: Two space-separated numbers P1 and P2, meaning that P1 thinks P2 is popular.

Output

* Line 1: An integer which represents the number of people who are considered popular by every other person.

Sample Input

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

Sample Output

```
1
```

Submit your homework with file name <stdID>.zip which includes your IntelliJ project and your report. You can ask your questions via asturan@gtu.edu.tr or moodle discussion forum.