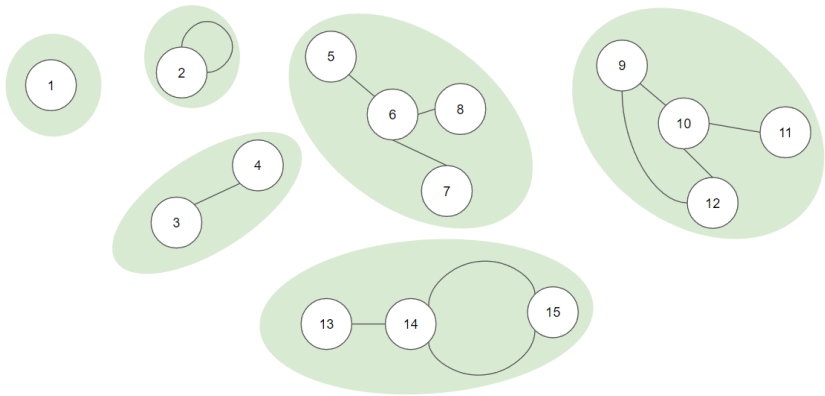


more small islands, and each small island contains one or more cities. Cities are numbered with $1, 2, \dots, n$. Cities in the same small island may be connected with bidirectional roads, but cities in different small islands are not connected with any road. Also within the same small island, from any city, all cities can be reached with some path (i.e. an alternating sequence of cities and roads).

Below is an example of island group: There are six small islands marked in green. Consider the small island consisted of cities 13, 14, 15. City 13 can reach city 14 with a path (city 13 \rightarrow a road \rightarrow city 14). City 13 can reach city 15 with two paths. City 13 can also reach itself with an empty path (a path without using any road).



If a small island has two cities u and v (u may be equal to v) such that u can reach v with different paths, the small island is said to be *road wasting*. Given the cities and the roads in the island group, please calculate the number of *road wasting* small islands.

Note that:

- There may be more than one road connecting the same pair of cities.
- There may be roads starting and ending with the same city.
- There may be only one city on an small island.

Input

The first line contains integer n and m , being the number of cities and the number of roads. The following m lines describes the bidirectional roads. The i -th line contains two integers u and v , denoting that the i -th path connects city u and city v .

Restrictions

- $1 \leq n \leq 10^6$
- $1 \leq m \leq 2 \cdot 10^6$
- $1 \leq u, v \leq n$

Output

Submissions

Rankings

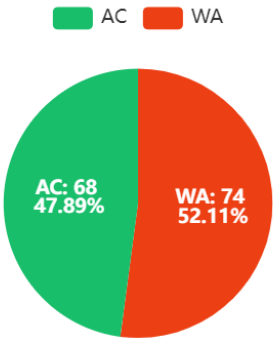
View Contest

Information

ID	3
Time Limit	3000MS
Memory Limit	512MB
IO Mode	Standard IO
Created By	ta_redleaf
Level	Hidden
Score	100
Tags	Show

Statistic

Details



15 12
2 2
3 4
5 6
6 8
7 6
9 10
10 12
12 9
10 11
14 15
15 14
13 14

3

Hint

The island group in the sample IO is shown in the figure in the description.

There are three *road-wasting* small islands: the island with city 2, the island with cities 9, 10, 11, 12, and the island with cities 13, 14, 15.

Language:

C

Theme:


Solarized Light

1

 You have solved the problem

 Submit for Sample Test

 Submit

 Contest has ended

Sample Test Input

Sample Test Output

6 8
7 6
9 10
10 12
12 9
10 11
14 15
15 14
13 14