Journey to the Moon

The member states of the UN are planning to send 2 people to the Moon. They want to choose two from different countries. You will be given a list of pairs of astronaut id’s. Each pair is made of astronauts from the same country. Determine how many pairs of astronauts from different countries they can choose from.

For example, we have the following data on 2 pairs of astronauts, and 4 astronauts total, numbered 0 through 3.

<table>
<thead>
<tr>
<th>ID</th>
<th>Country ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Astronauts by country are [0] and [1, 2, 3]. There are 3 pairs to choose from: [0, 1], [0, 2] and [0, 3].

**Input Format**

The first line contains two integers n and p, the number of astronauts and the number of pairs. Each of the next p lines contains 2 space-separated integers denoting astronaut ID’s of two who share the same nationality.

**Constraints**

- \(1 \leq n \leq 10^5\)
- \(1 \leq p \leq 10^4\)

**Output Format**

An integer that denotes the number of ways to choose a pair of astronauts from different countries.

**Sample Input 0**

```
5 3
0 1
2 3
0 4
```

**Sample Output 0**

```
6
```

**Explanation 0**

Persons numbered [0, 1, 4] belong to one country, and those numbered [2, 3] belong to another. The UN has 6 ways of choosing a pair:

[0, 2], [0, 3], [1, 2], [1, 3], [4, 2], [4, 3]

**Sample Input 1**

```
4 1
0 2
```

**Sample Output 1**

```
5
```
**Explanation 1**

Persons numbered $[0, 2]$ belong to the same country, but persons 1 and 3 don't share countries with anyone else. The UN has 5 ways of choosing a pair:

$[0, 1], [0, 3], [1, 2], [1, 3], [2, 3]$