



There is a SYSTEM used by N users, labeled with numbers from 1 to N .

In this SYSTEM, two users can become **friends** with each other.

if user X is a friend of user Y , user Y is always a friend of user X .

Currently, there are M pairs of friendships on the SYSTEM, with the i -th pair consisting of users A_i and B_i .

Determine the maximum number of times the following operation can be performed:

- Operation: Choose three users X , Y , and Z such that X and Y are friends, Y and Z are friends, but X and Z are not.

Constraints

- $2 \leq N \leq 2 \times 100000$
- $0 \leq M \leq 2 \times 100000$
- $1 \leq A_i < B_i \leq N$
- The pairs (A_i, B_i) are distinct.
- All input values are integers.

Input

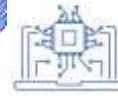
- The input is given from Standard Input in the following format:

```
N      M
A1     B1
:
AM     BM
```

Output

Print the answer.

4th BCPC programming league



Sample 1:

Input	Output
4 3	3
1 2	
2 3	
1 4	

Sample 2:

Input	Output
10 8	12
1 2	
2 3	
3 4	
4 5	
6 7	
7 8	
8 9	
9 10	

Sample 3:

Input	Output
3 0	0