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

- $2 \leq N \leq 2 \times 100000$
- $0 \leq M \leq 2 \times 100000$
- $1 \leq Ai < Bi \leq N$
- 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.

Sample 1:

Input	Output
4 3 1 2 2 3 1 4	3

Sample 2:

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

Sample 3:

Input	Output
3 0	0