

# Ants

2023/2024 SEASON – SIXTH ROUND



Winnie the Pooh is looking at the anthill in front of his home. He observed that the anthill has  $n$  piles and that the ants have built  $m$  tubes, connecting the piles. For some reason, there were tubes connecting the same pile, or different tubes, connecting the same pair of piles. Winnie the Pooh also observed that it is possible to travel from every pile to every other one, travelling through the tubes.

Winnie the Pooh, however, woke up on the wrong side of the bed and decided to attack that property of the anthill. He saw the amount of honey he has and decided that there is enough for him to clog two tubes.

He is asking you to write a program **ants.cpp**, which tells him the amount of pairs of tubes, for which, when Winnie the Pooh clogs them, there exists a pair of piles, without a path from one to the other.

## Input

The first line of the file **ants.in** contains  $n$  and  $m$  – the amount of piles and the amount of tubes in the anthill. Each of the next  $m$  lines contains two numbers  $i$  and  $j$  – that means there is a tube connecting piles  $i$  and  $j$ .

## Output

On the only line of the file **ants.out** print 1 number – Winnie the Pooh's desired amount.

## Constraints

$$1 \leq n \leq 2 * 10^3$$

$$1 \leq m \leq 10^5$$

**Time Limit: 0.5sec.**

**Memory Limit: 256 MB**

## Sample Test

Input (ants.in)	Output (ants.out)
3 3 1 2 2 3 3 1	3