



Challenge: The West Roads

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Difficulty: Easy

Submission Constraints:

- Time limit per test: **0,01 seconds**
- Memory limit per test: **Default (65 MB)**

Description

While Arthur Morgan was walking across Saint Denis' black market, he stumbled upon a mysterious man. This mysterious man challenged Arthur to a contest, and the loser had to pay a good sum of money to the winner. The question for Arthur was as follows: If you knew that the west was composed of X number of cities, and there is exactly one road from one city to another, can you guess the total number of roads?

Inputs

- One line that contains the number n – the total number of cities.

Outputs

- One line, the total number of roads.

Constraints

- $0 \leq n \leq 1000000000$.

Examples

Input	Output
3	3
5	10