



HOME CONTESTS GYM PROBLEMSET GROUPS RATING API CANADA CUP 🛣 SECTIONS

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

B. Simple Game

time limit per test: 1 second memory limit per test: 256 megabytes input: standard input output: standard output

One day Misha and Andrew were playing a very simple game. First, each player chooses an integer in the range from 1 to n. Let's assume that Misha chose number m, and Andrew chose number a.

Then, by using a random generator they choose a random integer C in the range between 1 and n (any integer from 1 to n is chosen with the same probability), after which the winner is the player, whose number was closer to C. The boys agreed that if m and a are located on the same distance from a0, Misha wins.

Andrew wants to win very much, so he asks you to help him. You know the number selected by Misha, and number n. You need to determine which value of a Andrew must choose, so that the probability of his victory is the highest possible.

More formally, you need to find such integer a ($1 \le a \le n$), that the probability that is maximal, where C is the equiprobably chosen integer from 1 to n (inclusive).

Input

The first line contains two integers n and $m(1 \le m \le n \le 10^9)$ — the range of numbers in the game, and the number selected by Misha respectively.

Output

Print a single number — such value *a*, that probability that Andrew wins is the highest. If there are multiple such values, print the minimum of them.

Examples

input	
31	
output	
2	
nput	
input 43	
output	
2	

Note

In the first sample test: Andrew wins if C is equal to 2 or 3. The probability that Andrew wins is 2/3. If Andrew chooses a=3, the probability of winning will be 1/3. If a=1, the probability of winning is 0.

In the second sample test: Andrew wins if C is equal to 1 and 2. The probability that Andrew wins is 1/2. For other choices of a the probability of winning is less.

Codeforces Round #316 (Div. 2)

Finished

→ Virtual participation

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Start virtual contest

→ Problem tags	
(constructive algorithms) (gr	eedy
(implementation) (math)	
	No tag edit access

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→ Contest materials

- Announcement
- Tutorial