Problem G. Obytes Myth

Input file: standard input
Output file: standard output
Time limit: 1 second

Obytes is known to be one of the best places to work, and one of the reasons is free snacks. There is a myth that, in every Obytes local, there is a room full of candies. Youssouf, a prodigy front-end developer in Obytes, gave himself the challenge of emptying this room one day.

The room has a maximum capacity of c candies, and at the beginning of the first day, the room is full. Starting with the first day, the following happens every day:

- a candies are brought to the room at the beginning of the day. The candies that doesn't fit to the room are thrown away
- Youssouf comes and eats candies. He eats i candies at the end of the i-th day. If the room is empty, Youssouf eats nothing

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Help Youssouf find the day when the room will be empty for the first time.

Input

The only line contains two integers c and a ($1 \leq c, a \leq 10^{18}$).

Output

Print the day when the room will be empty for the first time.

Example

Standard input	Standard output
8 1	5
5 2	4

(See explanation)

Explanation

In the second example, the capacity of the room is 5, and 2 candies are brought to the room at the beginning of every day. The following happens:

- Day 1: 2 candies are brought to the room. The room is already full. Youssouf eats 1 candy afterwards, so 4 candies remain
- Day 2: 2 candies are brought to the room. The room becomes full. Youssouf eats 2 candies afterwards, so 3 candies remain
- Day 3: 2 candies are brought to the room. The room becomes full. Youssouf eats 3 candies afterwards, so 2 candies remain
- Day 4: 2 candies are brought to the room. The room now has 4 candies. Youssouf eats 4 candies afterwards, so 0 candies remain. The room is empty

The answer is 4.