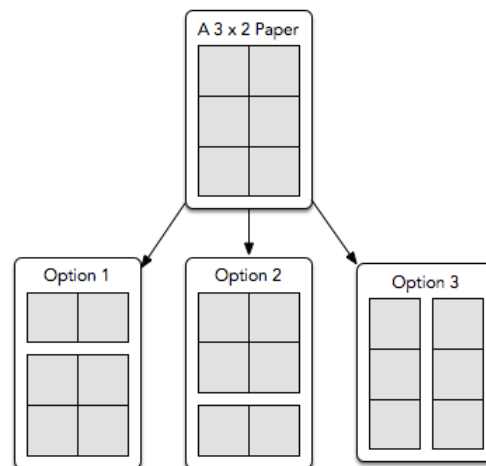


Cutting Paper Squares

Mary has an $n \times m$ piece of paper that she wants to cut into 1×1 pieces according to the following rules:

- She can only cut *one piece of paper at a time*, meaning she *cannot* fold the paper or layer already-cut pieces on top of one another.
- Each cut is a straight line from one side of the paper to the other side of the paper. For example, the diagram below depicts the three possible ways to cut a 3×2 piece of paper:



Given n and m , find and print the minimum number of cuts Mary must make to cut the paper into $n \cdot m$ squares that are 1×1 unit in size.

Input Format

A single line of two space-separated integers denoting the respective values of n and m .

Constraints

- $1 \leq n, m \leq 10^9$

Output Format

Print a long integer denoting the minimum number of cuts needed to cut the entire paper into 1×1 squares.

Sample Input

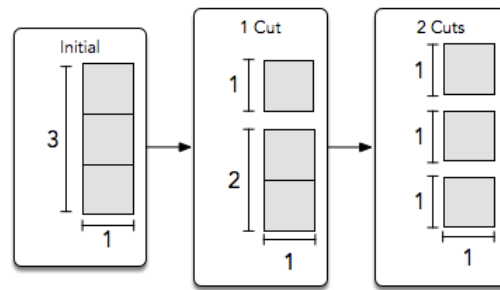
3 1

Sample Output

2

Explanation

Mary first cuts the 3×1 piece of paper into a 1×1 piece and a 2×1 piece. She then cuts the 2×1 piece into two 1×1 pieces:



Because it took her two cuts to get $n \times m = 3$ pieces of size 1×1 , we print **2** as our answer.