

# Miss M and the Flowers

Input file:           standard input  
Output file:         standard output  
Time limit:          1 second  
Memory limit:       256 megabytes

Miss M has arranged one of her flower beds in the shape of an  $n \times m$  chessboard, with each cell containing one flower.

She is planning to visit Sonichka and decided to pick a bouquet of flowers from the flower bed for her. But since Miss M is in a hurry, she has entrusted this task to a special robot.

The robot, always starting from the upper left corner, moves across the flower bed to the lower right corner (it can only move either down or to the right) and **must collect all the flowers on its path**. With each pass through the flower bed, the robot must collect at least one flower. After each pass, the robot returns to the starting position - the upper left corner.

Miss M does not care how optimally the robot performs its task, so she asks you to calculate the maximum number of passes through the flower beds the robot will need to pick absolutely all the flowers.

## Input

The first line contains one integer  $n$  ( $1 \leq n \leq 1\,000$ ).

The second line contains one integer  $m$  ( $1 \leq m \leq 1\,000$ ).

## Output

Print a single integer — the answer to the problem.

## Example

standard input	standard output
3 4	7

## Note

The algorithm for collecting flowers in the maximum number of passes will be as follows:

1. On the first pass through the flower bed, the robot will collect exactly 6 flowers, as it visits 6 cells (marked in red in the pictures).
2. Each subsequent pass will go through exactly one new cell, so the robot will collect the next 6 flowers in 6 passes.

In total,  $1 + 6 = 7$  passes.

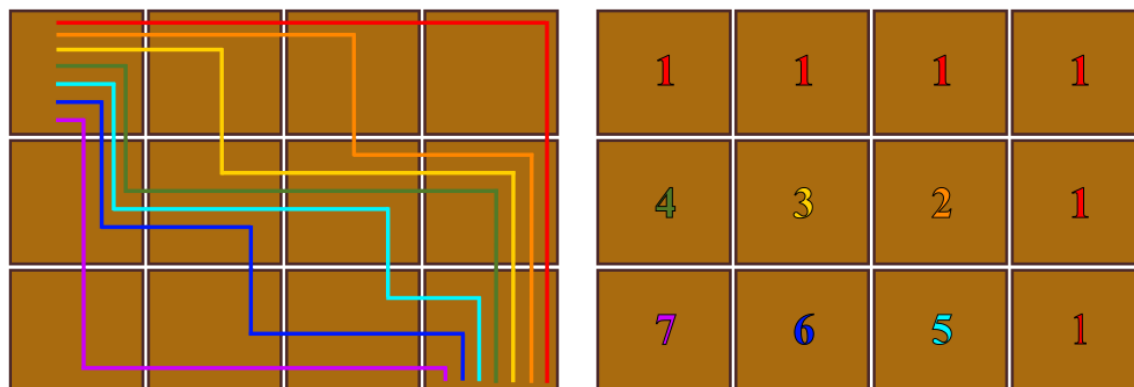


Diagram of the robot's paths from the first example in the problem statement.