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BST

## UAP Beginner Practice Contest 1

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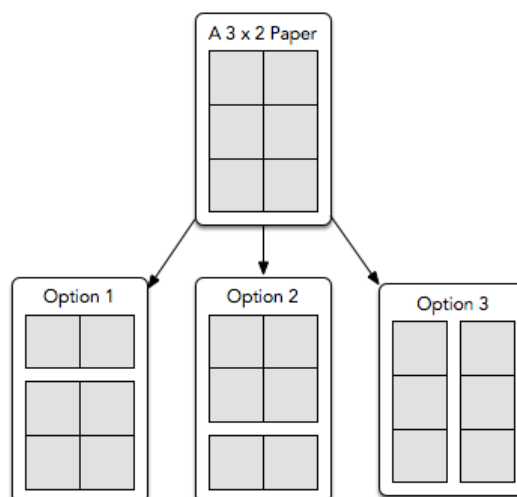
OS

Linux

## E - Cutting Paper Squares

Mary has an  $n \times m$  piece of paper that she wants to cut into  $1 \times 1$  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  $3 \times 2$  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  $1 \times 1$  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  $1 \times 1$  squares.

### Sample Input

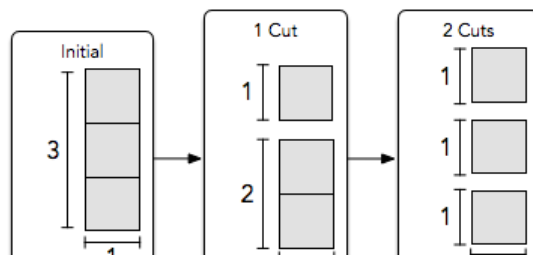
3 1

### Sample Output

2

### Explanation

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



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