



**Problem D**  
*LCM*

Input File: D.in

Output File: standard output

Time Limit: 0.1 seconds (C/C++)

Memory Limit: 256 megabytes

You are given two natural numbers **A** and **B**. Determine the natural number **N** such that the least common multiple of the numbers **A + N** and **B + N** is minimal.

**Input**

The only line of the input contains two natural numbers: **A** and **B**. None of them is exceeding  $10^9$ .

**Output**

Output the natural number **N** such that  $\text{LCM}(\mathbf{A} + \mathbf{N}, \mathbf{B} + \mathbf{N})$  is minimal. If there are several values of **N** which yield the minimum, output the smallest one.

Sample input	Sample output
4 10	2