



HOME CONTESTS GYM PROBLEMSET GROUPS RATING API CANADA CUP 🖫 SECTIONS

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

# A. Dreamoon and Stairs

time limit per test: 1 second memory limit per test: 256 megabytes input: standard input output: standard output

Dreamoon wants to climb up a stair of n steps. He can climb 1 or 2 steps at each move. Dreamoon wants the number of moves to be a multiple of an integer m.

What is the minimal number of moves making him climb to the top of the stairs that satisfies his condition?

## Input

The single line contains two space separated integers n, m ( $0 < n \le 10000$ ,  $1 < m \le 10$ ).

### **Output**

Print a single integer — the minimal number of moves being a multiple of m. If there is no way he can climb satisfying condition print - 1 instead.

## Examples

input	
10 2	
output	
6	
input	
3 5	
3 5 output	
-1	

#### Note

For the first sample, Dreamoon could climb in 6 moves with following sequence of steps: {2, 2, 2, 2, 1, 1}.

For the second sample, there are only three valid sequence of steps {2, 1}, {1, 2}, {1, 1, 1} with 2, 2, and 3 steps respectively. All these numbers are not multiples of 5.

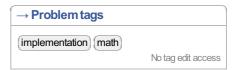
### Codeforces Round #272 (Div. 2)

#### **Finished**

# → Virtual participation

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Start virtual contest





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