

## 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  $n, m$  ( $0 < n \leq 10000, 1 < m \leq 10$ ).

### 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.

### Sample test(s)

<b>input</b>
10 2
<b>output</b>
6

  

<b>input</b>
3 5
<b>output</b>
-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)

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### → Submit?

Language: GNU C++ 4.7

 Choose file:  未选择文件。

Be careful: there is 50 points penalty for submission which fails the pretests or resubmission (except failure on the first test, denial of judgement or similar verdicts). "Passed pretests" submission verdict doesn't guarantee that the solution is absolutely correct and it will pass system tests.

### → Problem tags

[implementation](#) [math](#)

No tag edit access

### → Contest materials

- Announcement 