Q. 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.

Examples

input	Copy
10 2	

output	Copy
6	

input	Copy
3 5	

output	Copy
-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.

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Sheet #9 (General medium)

Finished

Practice

→ About Time Scaling

This contest uses time limits scaling policy (depending on a programming language). The system automatically adjusts time limits by the following multipliers for some languages. Despite scaling (adjustment), the time limit cannot be more than 30 seconds. Read the details by the link.