

A. System of Equations

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

Furik loves math lessons very much, so he doesn't attend them, unlike Rubik. But now Furik wants to get a good mark for math. For that Ms. Ivanova, his math teacher, gave him a new task. Furik solved the task immediately. Can you?

You are given a system of equations:

You should count, how many there are pairs of integers (a, b) ($0 \leq a, b$) which satisfy the system.

Input

A single line contains two integers n, m ($1 \leq n, m \leq 1000$) — the parameters of the system. The numbers on the line are separated by a space.

Output

On a single line print the answer to the problem.

Examples

input
9 3
output
1

input
14 28
output
1

input
4 20
output
0

Note

In the first sample the suitable pair is integers $(3, 0)$. In the second sample the suitable pair is integers $(3, 5)$. In the third sample there is no suitable pair.

→ Attention

Package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then value 800 ms will be displayed and used to determine the verdict.

Codeforces Round #131 (Div. 2)

Finished

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.


Start virtual contest

→ Problem tags

brute force

No tag edit access

→ Contest materials

- Announcement 
- Tutorial 