时间限制：C/C++/Rust/Pascal 2秒，其他语言4秒

空间限制：C/C++/Rust/Pascal 512 M，其他语言1024 M

Special Judge, 64bit IO Format: %lld

题目描述

A hash function converts data into an output string with a fixed number of characters; therefore, it creates a "tag" for each data.

In this problem, inputs are always integers. It can be a bad thing if two different integers x, y $(x \neq y)$ are converted into the same string. These two integers are considered identical somehow from the hash function. It is called a hash collision.

We consider the following hash function with parameter k:

$$H(x) = (x \bmod k) + (k \bmod x)$$

For each input pair (x, y) $(x \neq y)$, is there a hash function that results in a hash collision? If there is, output any such k; otherwise, output -1.

输入描述:

Each test contains multiple test cases. The first line contains the number of test cases T $(1 \leq T \leq 10^4)$.

Each test case consists of one line. The line contains two integers x, y $(1 \leq x, y \leq 10^9, x \neq y)$, the elements of the pair.

输出描述:

For each test case, output one integer --- the parameter k $(1 \leq k \leq 10^{18})$ that causes a hash collision. If there is no such positive number no larger than 10^{18} that satisfies the condition, output -1 instead.

示例1

输入

```
2
5 9
9 15
```

输出