

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

Square numbers are always lovable. A square number is a number that can be expressed by the square of an integer.

Here comes the group made of $l, l + 1, \dots, r$, and they want to be square numbers. The witch offers them a special potion. When a number drinks a bottle of potion, it can enlarge itself by one of its prime factors, and it can choose which one to add. As its dream is always to become a square number, if it can enlarge itself into a square number, it will always do so.

The potion is kind of dangerous, and drinking 2 or more bottles may cause the number to disappear, so the numbers won't do so. Also, as the potion can be quite expensive, the group decides to buy as few as they can while making the most amount of numbers to become square numbers. This is the most effective way to do so!

How many bottles of potion should they buy?

输入描述:

The input contains one line. The line consists of two integers l, r ($2 \leq l < r \leq 10^{18}$) .

输出描述:

An integer, the number of bottles of potion to buy.

示例1

输入

复制

2 9

输出

复制

2

说明

In the interval $[2, 9]$, there are two numbers which need a bottle of potion: 2 as $2 + 2 = 4 = 2^2$ and 6 as $6 + 3 = 9 = 3^2$

C++ (clang++18)

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ACM模
请通过
入输出
出描述

运行结果 自测