# 11461 Square Numbers

A square number is an integer number whose square root is also an integer. For example 1, 4, 81 are some square numbers. Given two numbers a and b you will have to find out how many square numbers are there between a and b (inclusive).

#### Input

The input file contains at most 201 lines of inputs. Each line contains two integers a and b (0 <  $a \le b \le 100000$ ). Input is terminated by a line containing two zeroes. This line should not be processed.

### **Output**

For each line of input produce one line of output. This line contains an integer which denotes how many square numbers are there between a and b (inclusive).

## Sample Input

1 4

1 10

0 0

## **Sample Output**

2

3