

## **Square Numbers**

Input: Standard Input
Output: Standard Output



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 ( $0 \le a \le b \le 100000$ ). 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).

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## **Output for Sample Input**

1 4	2	
1 10	3	
0 0		

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