A C M   I C P C   2 0 1 4

Contest : REGIONAL
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E	# Zeroes	
	INPUT	STANDARD INPUT
	OUTPUT	STANDARD OUTPUT

Factorial n is written as n! and n!=1*2*3...*(n-1)*n. For example 2! = 1*2 = 2, 3! = 1*2*3 = 6, 5! = 120, 10! = 3,628,800 etc. The function `fzero(n)` denotes the number of trailing zeroes in n! in decimal number system. For example `fzero(2)` = 0, `fzero(5)` = 1, `fzero(10)` = 2. Given the domain of the input parameter v of `fzero(v)` function, you will have to find out how many different values of `fzero()` are there within this range.

Input

The input file contains at most 50001 lines of inputs. Each line contains two positive integers **low** and **high** ($0 <$ **low** $\leq$ **high** $\leq 9*10^{18}$). Input is terminated by a line containing two zeroes.

Output

For each line of input produce one line of output. This line contains an integer D, which denotes how many different values the function `fzero(v)` can have if (low $\leq$ v $\leq$ high).

Note

Illustration for Sample input 1: as 1! = 1, 2! = 2, 3! = 6, 4! = 24, 5! = 120, 6! = 720, 7! = 5,040, 8! = 40,320, 9! = 362,880, 10! = 3,628,800, so `fzero(1)` = 0, `fzero(2)` = 0, `fzero(3)` = 0, `fzero(4)` = 0, `fzero(5)` = 1, `fzero(6)` = 1, `fzero(7)` = 1, `fzero(8)` = 1, `fzero(9)` = 1 and `fzero(10)` = 2. So in this range (1 to 10) there are three different values of `fzero(v)` => 0, 1 and 2.

Example

Input	Output
1 10 1 3 0 0	3 1