

J: TNumbers

Source file name: `tnumbers.c`, `tnumbers.cpp`, `tnumbers.java`, or `tnumbers.py`

Author: Rodrigo Cardoso

Note that

$$1 + 2 = 3,$$

but

$$1 \neq 2 + 3 + 4$$

$$1 + 2 \neq 3 + 4$$

$$1 + 2 + 3 \neq 4.$$

A *TNumber* n is a positive integer for which there exist a number k , $1 \leq k < n$, such that the sum of the first k numbers equals the sum of the numbers from $k + 1$ to n . It is clear that 3 is a TNumber, but 4 is not.

Given two non-negative integers a and b , with $a \leq b$, determine how many numbers n satisfying $a \leq n \leq b$ are TNumbers.

Input

The problem input consists of several cases. A case is described with a line with two integer numbers a and b , $1 \leq a \leq b \leq 10^8$. The end of the input is signaled by a line with two zero values '0 0', which should not be processed.

The input must be read from standard input.

Output

For each case, output a line with exactly one integer value indicating how many TNumbers are there.

The output must be written to standard output.

Sample Input	Sample Output
1 5	1
3 3	1
4 8	0
0 0	