A number is **perfect** if it is equal to the sum of its divisors, the ones that are smaller than it. For example, number 28 is perfect because 28 = 1 + 2 + 4 + 7 + 14.

Motivated by this definition, we introduce the metric of **imperfection** of number *N*, denoted with *f(N)*, as the absolute difference between *N* and the sum of its divisors less than *N*. It follows that perfect numbers' imperfection score is 0, and the rest of natural numbers have a higher imperfection score. For example:

- f(6) = |6 - 1 - 2 - 3| = 0,
- f(11) = |11 - 1| = 10,
- f(24) = |24 - 1 - 2 - 3 - 4 - 6 - 8 - 12| = |-12| = 12.

Write a programme that, for positive integers *A* and *B,* calculates the sum of imperfections of all numbers between *A* and *B*: *f(A) + f(A + 1) + ... + f(B)*.

INPUT

The first line of input contains the positive integers *A* and *B* ($1 \le A \le B \le 10^7$).

OUTPUT

The first and only line of output must contain the required sum.

SAMPLE TESTS

input	input
1 9	24 24
output	**output**
21	12

Clarification of the first test case: 1 + 1 + 2 + 1 + 4 + 0 + 6 + 1 + 5.