

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 : $f(A) + f(A + 1) + \dots + f(B)$.

INPUT

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

OUTPUT

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

SAMPLE TESTS

input

1 9

output

21

input

24 24

output

12

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