"Operation - Modulo"

Mahmud solved some easy math problems from SPOJ and called himself king of number theory. ~~GodFather~~ GodMATHer Rashad heard it and got angry, so he kidnapped Mahmud. Rashad gave him a task called "Operation - Modulo". Mahmud must solve this task, you know what will happen otherwise ;(. In the Operation - Modulo, we define a function **f(n) = (n mod 1) + (n mod 2) + (n mod 3) + ... + (n mod n)**, where n mod x donates the remainder when dividing **n** by **x**. Rashad interests with integers n such that **f(n)=f(n-1)**, so he gave Mahmud two numbers **L** and **R**, and demands him to find the sum of all integers **n** such that **L ≤ n ≤ R** and **f(n)=f(n-1)**.

Input

First and the only line of input contains two positive integers, **L** and **R** ($1 \leq L \leq R \leq 10^{18}$).

Output

Print the demanded sum in one line.

Example

Input:

1 3

Output:

3

Note:

I hope you proved your solution before submitting it :)