

DMOPC '16 Contest 2 P4 - Zeros

Time limit: 1.0s **Memory limit:** 64M

Recall that the factorial function is defined as follows:

$$N! = N \times (N - 1) \times \cdots \times 2 \times 1$$

Given integers a and b , please find the number of natural numbers N such that $N!$ has a number of trailing zeros in the range of $[a, b]$.

Constraints

Subtask 1 [20%]

$$0 \leq a \leq b \leq 15$$

Subtask 2 [30%]

$$0 \leq a \leq b \leq 10^5$$

Subtask 3 [50%]

$$0 \leq a \leq b \leq 10^9$$

Input Specification

The first line of the input contains the two integers a and b .

Output Specification

The number of values of N that satisfy the condition.

Sample Input

```
0 2
```

Sample Output

```
14
```

Explanation

$1! = 1$ is the first element that satisfies the condition, and $14! = 87\,178\,291\,200$ is the last element. Hence, there are 14 values of N that satisfy the condition.