

# Fear Factoring



The Slivians are afraid of factoring; it's just, well, difficult.

Really, they don't even care about the factors themselves, just how much they sum to.

We can define  $F(n)$  as the sum of all of the factors of  $n$ ; so  $F(6) = 12$  and  $F(12) = 28$ . Your task is, given two integers  $a$  and  $b$  with  $a \leq b$ , to calculate

$$S = \sum_{a \leq n \leq b} F(n).$$

## 1 Input

The input consists of a single line containing space-separated integers  $a$  and  $b$  ( $1 \leq a \leq b \leq 10^{12}$ ;  $b - a \leq 10^6$ ).

## 2 Output

Print  $S$  on a single line.

## 3 Sample Input and Output

101 101	102
28 28	56
1 10	87
987654456799 987654456799	987654456800

963761198400 963761198400	5531765944320
5260013877 5260489265	4113430571304040