Mod Intersect

Input file: standard input
Output file: standard output

Time limit: 2 seconds Memory limit: 64 megabytes

Let's have a series M(x), where i^{th} term of the series is defined as following.

$$M(x)_i = i \ MOD \ x$$

Given four integers a, b, l, r you have to determine the number of matching-intersections for M(a) and M(b) in range [l, r].

We call i to be a matching-intersection if $M(a)_i = M(b)_i$

Input

Input contains only one line having four space separated integers a, b, l, r in given order.

$$1 \leq a \leq b \leq l \leq r \leq 10^{18}$$

Output

Output a single integer denoting the number of matching-intersections.

Example

standard input	standard output
1 2 3 4	1