

Lia is fascinated by anything she considers to be a *twin*. She calls a pairs of positive integers, i and j , twins if:

- They are both prime. A **prime** number is an integer greater than **1** that has no positive divisors other than **1** and itself.
- Their absolute difference is exactly equal to **2** (i.e., $|j - i| = 2$).

Given an inclusive interval of integers from n to m , can you help Lia find the number of pairs of twins there are in the interval (i.e., $[n, m]$)? Note that pairs (i, j) and (j, i) are considered to be the same pair.

Input Format

Two space-separated integers describing the respective values of n and m .

Constraints

- $1 \leq n \leq m \leq 10^9$
- $m - n \leq 10^6$

Output Format

Print a single integer denoting the number of pairs of twins.

Sample Input 0

3 13

Sample Output 0

3

Explanation 0

There are three pairs of twins: $(3, 5)$, $(5, 7)$, and $(11, 13)$.