

858. Mirror Reflection

Description

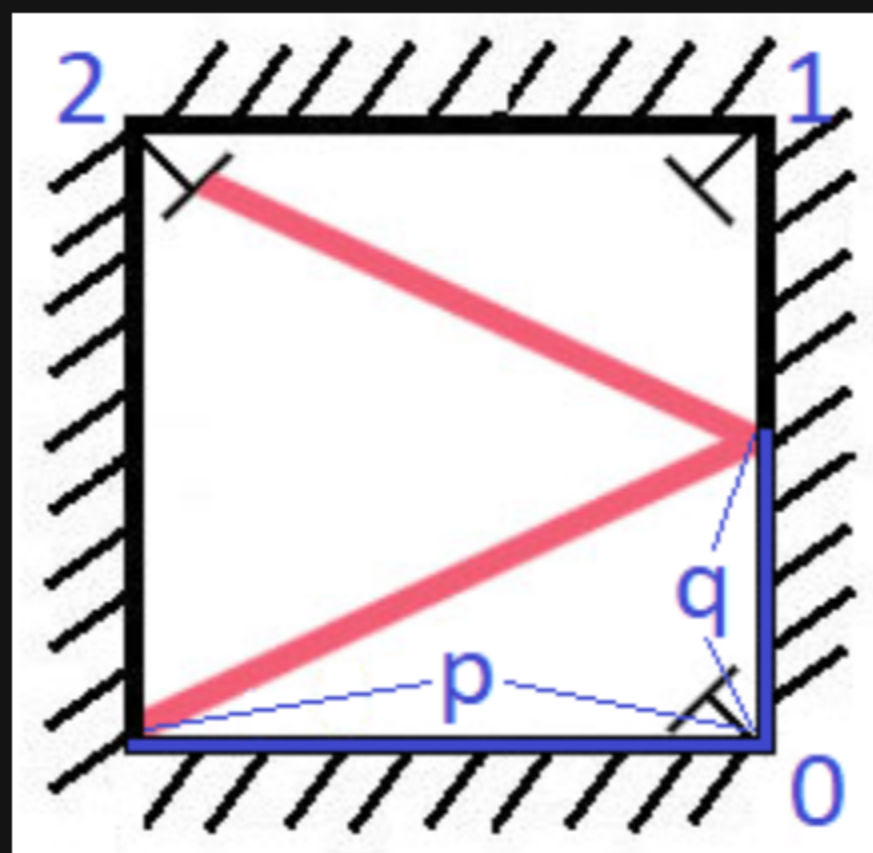
There is a special square room with mirrors on each of the four walls. Except for the southwest corner, there are receptors on each of the remaining corners, numbered `0`, `1`, and `2`.

The square room has walls of length `p` and a laser ray from the southwest corner first meets the east wall at a distance `q` from the `0th` receptor.

Given the two integers `p` and `q`, return *the number of the receptor that the ray meets first*.

The test cases are guaranteed so that the ray will meet a receptor eventually.

Example 1:



Input: `p = 2, q = 1`

Output: `2`

Explanation: The ray meets receptor 2 the first time it gets reflected back to the left wall.

Example 2:

Input: `p = 3, q = 1`

Output: `1`

Constraints:

- `1 <= q <= p <= 1000`

