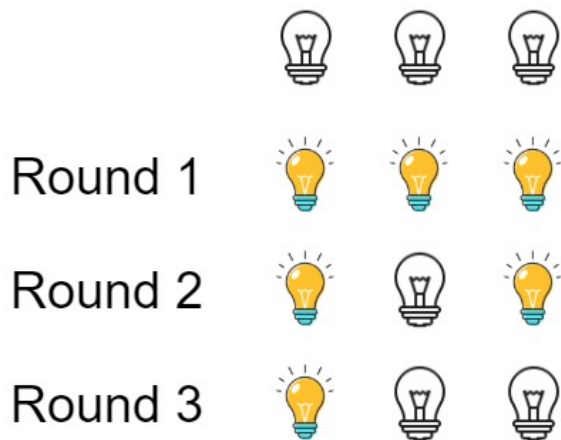


319. Bulb Switcher

- There are n bulbs that are initially off. You first turn on all the bulbs, then you turn off every second bulb.
- On the third round, you toggle every third bulb (turning on if it's off or turning off if it's on). For the i th round, you toggle every i bulb. For the n th round, you only toggle the last bulb.
- Return the number of bulbs that are on after n rounds.

Example 1:



- **Input:** $n = 3$
- **Output:** 1
- **Explanation:**
 - At first, the three bulbs are [off, off, off].
 - After the first round, the three bulbs are [on, on, on].
 - After the second round, the three bulbs are [on, off, on].
 - After the third round, the three bulbs are [on, off, off].
 - So you should return 1 because there is only one bulb is on.

Example 2:

- **Input:** $n = 0$
- **Output:** 0

Example 3:

- **Input:** $n = 1$
- **Output:** 1

Constraints:

- $0 \leq n \leq 10^9$