2579. Count Total Number of Colored Cells

Hint

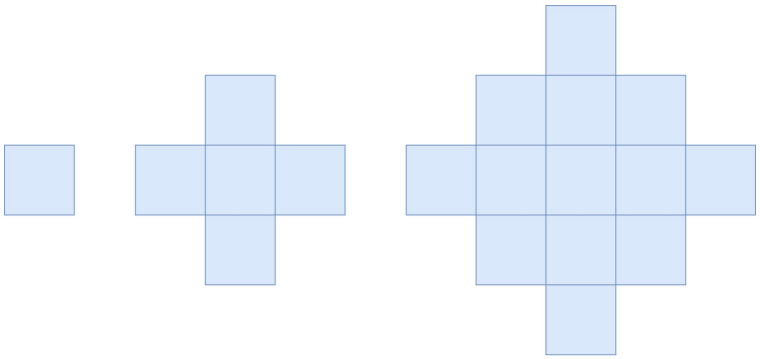
Medium 100 3

Companies

There exists an infinitely large two-dimensional grid of uncolored unit cells. You are given a positive integer `n`, indicating that you must do the following routine for `n` minutes:

- At the first minute, color **any** arbitrary unit cell blue.
- Every minute thereafter, color blue **every** uncolored cell that touches a blue cell.

Below is a pictorial representation of the state of the grid after minutes 1, 2, and 3.



n=1 **n=2** **n=3**

Return *the number of **colored cells** at the end of* `n` *minutes.*

Example 1:

Input: n = 1
Output: 1
Explanation: After 1 minute, there is only 1 blue cell, so we return 1.

Example 2:

Input: n = 2
Output: 5
Explanation: After 2 minutes, there are 4 colored cells on the boundary and 1 in the center, so we return 5.

Constraints:

- $1 <= n <= 10^5$

Accepted 13.3K Submissions 24.2K Acceptance Rate 55.0%

Seen this question in a real interview before? 1/4

Yes No

Discussion (5)

Similar Questions