Example 1:

Input: room = [[0,0,0],[1,1,0],[0,0,0]] Output: 7

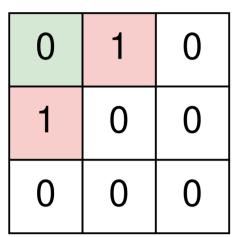
The robot cleans the spaces at (0, 0), (0, 1), and (0, 2). The robot is at the edge of the room, so it turns 90 degrees clockwise and now The robot cleans the spaces at (1, 2), and (2, 2).

The robot is at the edge of the room, so it turns 90 degrees clockwise and now faces left. The robot cleans the spaces at (2, 1), and (2, 0).

The robot has cleaned all 7 empty spaces, so return 7.

Example 2:

Explanation:



Input: room = [[0,1,0],[1,0,0],[0,0,0]] Output: 1

Explanation: The robot cleans the space at (0, 0).

The robot hits an object, so it turns 90 degrees clockwise and now faces down. The robot hits an object, so it turns 90 degrees clockwise and now faces left. The robot is at the edge of the room, so it turns 90 degrees clockwise and now

The robot is at the edge of the room, so it turns 90 degrees clockwise and now faces right.

The robot is back at its starting position. The robot has cleaned 1 space, so return 1.

Constraints:

faces up.

• m == room.length • n == room[r].length

• $1 \le m$, $n \le 300$ • room[r][c] is either 0 or 1.

• room[0][0] == 0

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Hide Hint 1

Simulate how the robot moves and keep track of how many spaces it has cleaned so far.

Hide Hint 2 When can we stop the simulation?

When the robot reaches a space that it has already cleaned and is facing the same direction as before, we can stop the simulation.

Hard

≡ Problems

➢ Pick One