286. Walls and Gates Premium

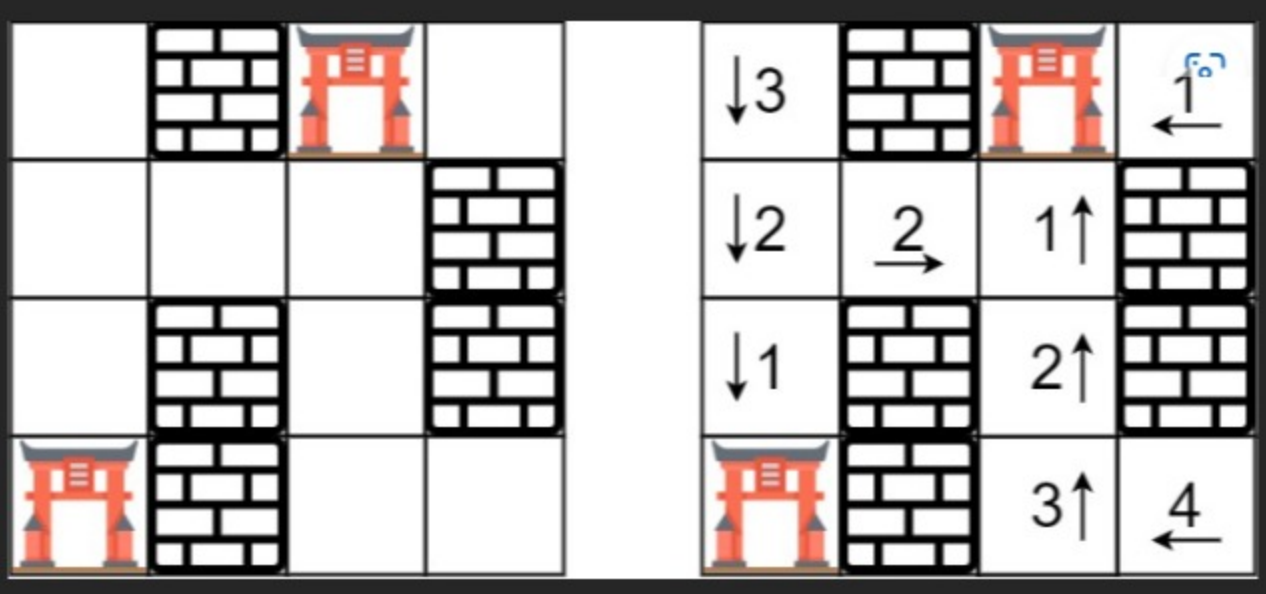
Medium | Topics | Companies

You are given an `m x n` grid `rooms` initialized with these three possible values.

- `-1` A wall or an obstacle.
- `0` A gate.
- `INF` Infinity means an empty room. We use the value $2^{31} - 1 = 2147483647$ to represent `INF` as you may assume that the distance to a gate is less than `2147483647`.

Fill each empty room with the distance to *its nearest gate*. If it is impossible to reach a gate, it should be filled with `INF`.

Example 1:




```
Input: rooms = [[2147483647,-1,0,2147483647],
[2147483647,2147483647,2147483647,-1],
[2147483647,-1,2147483647,-1],[0,-1,2147483647,2147483647]]
Output: [[3,-1,0,1],[2,2,1,-1],[1,-1,2,-1],[0,-1,3,4]]
```

Example 2:

```
Input: rooms = [[-1]]
Output: [[-1]]
```

Constraints:

- `m == rooms.length`
- `n == rooms[i].length`
- `1 <= m, n <= 250`
- `rooms[i][j]` is `-1`, `0`, or $2^{31} - 1$.

Seen this question in a real interview before? 1/5

Yes No

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Discussion (18)