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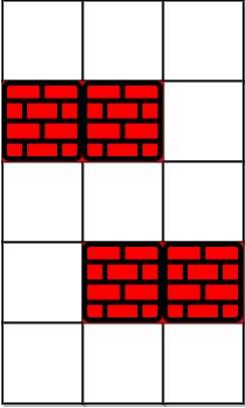
1293. Shortest Path in a Grid with Obstacles Elimination

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You are given an $m \times n$ integer matrix `grid` where each cell is either `0` (empty) or `1` (obstacle). You can move up, down, left, or right from and to an empty cell in **one step**.

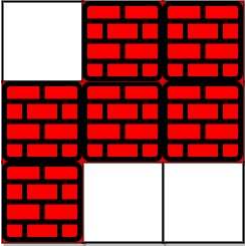
Return the minimum number of **steps** to walk from the upper left corner $(0, 0)$ to the lower right corner $(m - 1, n - 1)$ given that you can eliminate **at most** k obstacles. If it is not possible to find such walk return -1 .

Example 1:



Input: `grid = [[0,0,0],[1,1,0],[0,0,0],[0,1,1],[0,0,0]]`, $k = 1$
Output: 6
Explanation:
The shortest path without eliminating any obstacle is 10.
The shortest path with one obstacle elimination at position $(3,2)$ is 6. Such path is $(0,0) \rightarrow (0,1) \rightarrow (0,2) \rightarrow (1,2) \rightarrow (2,2) \rightarrow (3,2) \rightarrow (4,2)$.

Example 2:



Input: `grid = [[0,1,1],[1,1,1],[1,0,0]]`, $k = 1$
Output: -1
Explanation: We need to eliminate at least two obstacles to find such a walk.

Constraints:

- $m == \text{grid.length}$
- $n == \text{grid}[i].\text{length}$
- $1 \leq m, n \leq 40$
- $1 \leq k \leq m * n$
- `grid[i][j]` is either `0` or `1`.
- `grid[0][0] == grid[m - 1][n - 1] == 0`

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```
1 class Solution {
2     public int shortestPath(int[][] grid, int k) {
3     }
4 }
5 
```

Problems

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Console

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