

5411. Cherry Pickup II

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Given a $rows \times cols$ matrix `grid` representing a field of cherries. Each cell in `grid` represents the number of cherries that you can collect.

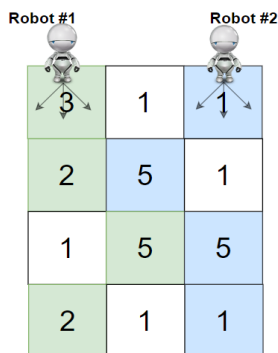
You have two robots that can collect cherries for you, Robot #1 is located at the top-left corner $(0,0)$, and Robot #2 is located at the top-right corner $(0, cols-1)$ of the grid.

Return the maximum number of cherries collection using both robots by following the rules below:

- From a cell (i,j) , robots can move to cell $(i+1, j-1)$, $(i+1, j)$ or $(i+1, j+1)$.
- When any robot is passing through a cell, It picks it up all cherries, and the cell becomes an empty cell (0).
- When both robots stay on the same cell, only one of them takes the cherries.
- Both robots cannot move outside of the grid at any moment.
- Both robots should reach the bottom row in the `grid`.

User Accepted:	479
User Tried:	559
Total Accepted:	499
Total Submissions:	782
Difficulty:	Hard

Example 1:





Input: `grid = [[3,1,1],[2,5,1],[1,5,5],[2,1,1]]`

Output: 24

Explanation: Path of robot #1 and #2 are described in color green and blue respectively. Cherries taken by Robot #1, $(3 + 2 + 5 + 2) = 12$. Cherries taken by Robot #2, $(1 + 5 + 5 + 1) = 12$. Total of cherries: $12 + 12 = 24$.

Example 2:

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> Robot #1  </div> <div style="text-align: center;"> Robot #2  </div> </div>						
1	0	0	0	0	0	1
2	0	0	0	0	3	0
2	0	9	0	0	0	0
0	3	0	5	4	0	0
1	0	2	3	0	0	6

Input: grid = [[1,0,0,0,0,0,1],[2,0,0,0,0,3,0],[2,0,9,0,0,0,0],[0,3,0,5,4,0,0],[1,0,2,3,0,0,6]]

Output: 28

Explanation: Path of robot #1 and #2 are described in color green and blue respectively.
 Cherries taken by Robot #1, (1 + 9 + 5 + 2) = 17.
 Cherries taken by Robot #2, (1 + 3 + 4 + 3) = 11.
 Total of cherries: 17 + 11 = 28.

Example 3:

Input: grid = [[1,0,0,3],[0,0,0,3],[0,0,3,3],[9,0,3,3]]

Output: 22

Example 4:

Input: grid = [[1,1],[1,1]]

Output: 4

Constraints:

- rows == grid.length
- cols == grid[i].length
- 2 <= rows, cols <= 70
- 0 <= grid[i][j] <= 100

JavaScript



```

1 /**
2  * @param {number[][]} grid
3  * @return {number}
4  */
5 var cherryPickup = function(grid) {
6
7 };

```

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