

296. Best Meeting Point Premium

Hard Topics Companies Hint

Given an `m x n` binary grid `grid` where each `1` marks the home of one friend, return *the minimal **total travel distance***.

The **total travel distance** is the sum of the distances between the houses of the friends and the meeting point.

The distance is calculated using [Manhattan Distance](#), where `distance(p1, p2) = |p2.x - p1.x| + |p2.y - p1.y|`.

Example 1:

1	0	0	0	1
0	0	0	0	0
0	0	1	0	0

Input: `grid = [[1,0,0,0,1],[0,0,0,0,0],[0,0,1,0,0]]`
Output: 6
Explanation: Given three friends living at (0,0), (0,4), and (2,2).
The point (0,2) is an ideal meeting point, as the total travel distance of $2 + 2 + 2 = 6$ is minimal.
So return 6.

Example 2:

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

Constraints:

- `m == grid.length`
- `n == grid[i].length`
- `1 <= m, n <= 200`
- `grid[i][j]` is either `0` or `1`.
- There will be **at least two** friends in the `grid`.

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

Yes No

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Topics

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Companies

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6 months ago

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Hint 1

Try to solve it in one dimension first. How can this solution apply to the two dimension case?

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