

## 5835. Maximum Matrix Sum

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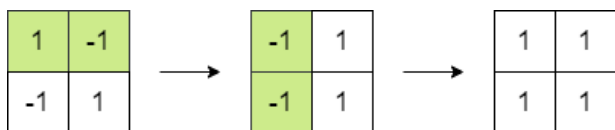
You are given an  $n \times n$  integer matrix. You can do the following operation **any** number of times:

- Choose any two **adjacent** elements of matrix and **multiply** each of them by  $-1$ .

Two elements are considered **adjacent** if and only if they share a **border**.

Your goal is to **maximize** the summation of the matrix's elements. Return *the maximum sum of the matrix's elements using the operation mentioned above*.

## Example 1:



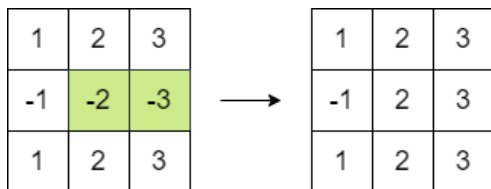
**Input:** matrix = [[1,-1],[-1,1]]

**Output:** 4

**Explanation:** We can follow the following steps to reach sum equals 4:

- Multiply the 2 elements in the first row by  $-1$ .
- Multiply the 2 elements in the first column by  $-1$ .

## Example 2:



**Input:** matrix = [[1,2,3],[-1,-2,-3],[1,2,3]]

**Output:** 16

**Explanation:** We can follow the following step to reach sum equals 16:

- Multiply the 2 last elements in the second row by  $-1$ .

## Constraints:

- $n == \text{matrix.length} == \text{matrix}[i].\text{length}$
- $2 \leq n \leq 250$
- $-10^5 \leq \text{matrix}[i][j] \leq 10^5$

JavaScript



```

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

```