2108. Minimize the Difference Between Target and Chosen Elements

Difficulty: Medium

https://leetcode.com/problems/minimize-the-difference-between-target-and-chosen-elements

You are given an m x n integer matrix mat and an integer target.

Choose one integer from **each row** in the matrix such that the **absolute difference** between target and the **sum** of the chosen elements is **minimized**.

Return the minimum absolute difference.

The **absolute difference** between two numbers a and b is the absolute value of a - b.

Example 1:

1	2	3
4	5	6
7	8	9

Input: mat = [[1,2,3],[4,5,6],[7,8,9]], target = 13

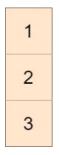
Output: 0

Explanation: One possible choice is to:

- Choose 1 from the first row.
- Choose 5 from the second row.
- Choose 7 from the third row.

The sum of the chosen elements is 13, which equals the target, so the absolute difference is 0.

Example 2:



Input: mat = [[1],[2],[3]], target = 100

Output: 94

Explanation: The best possible choice is to:

- Choose 1 from the first row.
- Choose 2 from the second row.
- Choose 3 from the third row.

The sum of the chosen elements is 6, and the absolute difference is 94.

Example 3:



Input: mat = [[1,2,9,8,7]], target = 6

Output: 1

Explanation: The best choice is to choose 7 from the first row.

The absolute difference is 1.

Constraints:

- m == mat.length
- n == mat[i].length
- 1 <= m, n <= 70
- 1 <= mat[i][j] <= 70
- 1 <= target <= 800