# 2500. Delete Greatest Value in Each Row

# Description

You are given an m x n matrix grid consisting of positive integers.

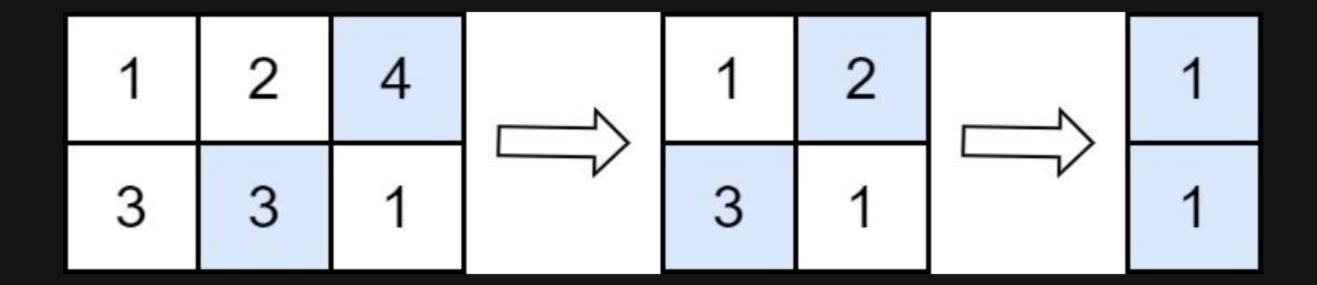
Perform the following operation until grid becomes empty:

- Delete the element with the greatest value from each row. If multiple such elements exist, delete any of them.
- Add the maximum of deleted elements to the answer.

Note that the number of columns decreases by one after each operation.

Return the answer after performing the operations described above.

#### **Example 1:**



**Input:** grid = [[1,2,4],[3,3,1]]

Output: 8

Explanation: The diagram above shows the removed values in each step.

- In the first operation, we remove 4 from the first row and 3 from the second row (notice that, there are two cells with value 3 and we can remove any of them). We add 4 to the answer.
- In the second operation, we remove 2 from the first row and 3 from the second row. We add 3 to the answer.
- In the third operation, we remove 1 from the first row and 1 from the second row. We add 1 to the answer.

The final answer = 4 + 3 + 1 = 8.

#### Example 2:

10

**Input:** grid = [[10]]

Output: 10

Explanation: The diagram above shows the removed values in each step.

- In the first operation, we remove 10 from the first row. We add 10 to the answer.

The final answer = 10.

### **Constraints:**

- m == grid.length
- n == grid[i].length
- 1 <= m, n <= 50
- 1 <= grid[i][j] <= 100