

6257. Delete Greatest Value in Each Row

My Submissions (/contest/weekly-contest-323/problems/delete-greatest-value-in-each-row/submissions/)

Back to Contest (/contest/weekly-contest-323/)

You are given an $m \times n$ matrix `grid` consisting of positive integers.

Perform the following operation until `grid` becomes empty:

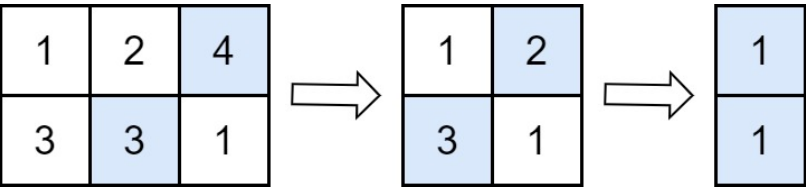
- Delete the element with the greatest value from each row. If multiple such elements exist, delete any of them.
- Add the maximum of deleted elements to the answer.

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

Return *the answer after performing the operations described above*.

User Accepted:	42
User Tried:	58
Total Accepted:	42
Total Submissions:	58
Difficulty:	Easy

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).
- 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:



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:

- $m == \text{grid.length}$
- $n == \text{grid}[i].\text{length}$
- $1 \leq m, n \leq 50$
- $1 \leq \text{grid}[i][j] \leq 100$

JavaScript

```
1 const deleteGreatestValue = (g) => {
2   let n = g.length, m = g[0].length, tot = m, res = 0;
3   while (tot--) {
4     let max = Number.MIN_SAFE_INTEGER;
5     for (let i = 0; i < n; i++) {
6       let rowMax = Math.max(...g[i]);
7       for (let j = 0; j < m; j++) {
8         if (g[i][j] == rowMax) {
9           g[i][j] = -1;
10          break;
11        }
12      }
13    }
14    res += rowMax;
15  }
16  return res;
17 }
```

```
12         }
13         max = Math.max(max, rowMax);
14     }
15     res += max;
16 }
17 return res;
18 };
```

☐ Custom Testcase[Use Example Testcases](#)[Run](#)[Submit](#)**Submission Result: Accepted** (</submissions/detail/857871892/>) ?[More Details > \(/submissions/detail/857871892/\)](/submissions/detail/857871892/)

Share your acceptance!

Copyright © 2022 LeetCode

[Help Center \(/support/\)](/support/) | [Jobs \(/jobs/\)](/jobs/) | [Bug Bounty \(/bugbounty/\)](/bugbounty/) | [Online Interview \(/interview/\)](/interview/) | [Students \(/student/\)](/student/) | [Terms \(/terms/\)](/terms/) | [Privacy Policy \(/privacy/\)](/privacy/)[United States \(/region\)](#)