1605. Find Valid Matrix Given Row and Column Sums

Description

You are given two arrays `rowSum` and `colSum` of non-negative integers where `rowSum[i]` is the sum of the elements in the `i th` row and `colSum[j]` is the sum of the elements of the `j th` column of a 2D matrix. In other words, you do not know the elements of the matrix, but you do know the sums of each row and column.

Find any matrix of **non-negative** integers of size `rowSum.length x colSum.length` that satisfies the `rowSum` and `colSum` requirements.

Return *a 2D array representing* ***any*** *matrix that fulfills the requirements*. It's guaranteed that **at least one** matrix that fulfills the requirements exists.

Example 1:

```
Input: rowSum = [3,8], colSum = [4,7]
Output: [[3,0],
         [1,7]]
Explanation:
0 th row: 3 + 0 = 3 == rowSum[0]
1 st row: 1 + 7 = 8 == rowSum[1]
0 th column: 3 + 1 = 4 == colSum[0]
1 st column: 0 + 7 = 7 == colSum[1]
The row and column sums match, and all matrix elements are non-negative.
Another possible matrix is: [[1,2],
                             [3,5]]
```

Example 2:

```
Input: rowSum = [5,7,10], colSum = [8,6,8]
Output: [[0,5,0],
         [6,1,0],
         [2,0,8]]
```

Constraints:

- `1 <= rowSum.length, colSum.length <= 500`
- `0 <= rowSum[i], colSum[i] <= 10 8`
- `sum(rowSum) == sum(colSum)`