

Problem 498: Diagonal Traverse

Problem Information

Difficulty: Medium

Acceptance Rate: 66.78%

Paid Only: No

Tags: Array, Matrix, Simulation

Problem Description

Given an $m \times n$ matrix `mat`, return _an array of all the elements of the array in a diagonal order_.

Example 1:

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

Example 2:

Input: mat = [[1,2],[3,4]] **Output:** [1,2,3,4]

Constraints:

$m == \text{mat.length}$ * $n == \text{mat[i].length}$ * $1 \leq m, n \leq 104$ * $1 \leq m * n \leq 104$ * $-105 \leq \text{mat}[i][j] \leq 105$

Code Snippets

C++:

```
class Solution {
public:
    vector<int> findDiagonalOrder(vector<vector<int>>& mat) {
```

```
    }  
};
```

Java:

```
class Solution {  
public int[] findDiagonalOrder(int[][] mat) {  
  
}  
}
```

Python3:

```
class Solution:  
def findDiagonalOrder(self, mat: List[List[int]]) -> List[int]:
```