

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:

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

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]:
```