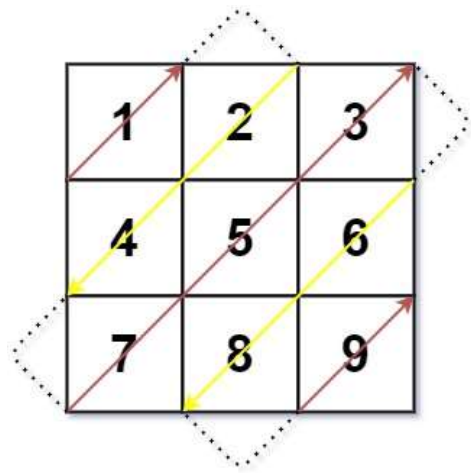


## 498. Diagonal Traverse

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:

- $m == \text{mat.length}$
- $n == \text{mat}[i].\text{length}$
- $1 \leq m, n \leq 10^4$
- $1 \leq m * n \leq 10^4$
- $-10^5 \leq \text{mat}[i][j] \leq 10^5$