Problem statement

You have been given a 2-D array **'mat'** of size **'M x N'** where 'M' and 'N' denote the number of rows and columns, respectively. The elements of each row are sorted in non-decreasing order.

Moreover, the first element of a row is greater than the last element of the previous row (if it exists).

You are given an integer **'target'**, and your task is to find if it exists in the given 'mat' or not.

Example:

Input: 'M' = 3, 'N' = 4, 'mat' = [[1, 2, 3, 4], [5, 6, 7, 8], [9, 10, 11, 12]], 'target' = 8

Output: true

Explanation: The output should be true as '8' exists in the matrix.

Detailed explanation (Input/output format, Notes, Images)

Sample Input 1 :

3 4 8
1 2 3 4
5 6 7 8
9 10 11 12

Sample Output 1 :

true

Explanation For Sample Input 1 :

The 'target' = 8 exists in the 'mat' at index (1, 3).

Sample Input 2 :

3 3 78
1 2 4
6 7 8
9 10 34

Sample Output 2 :

false

Explanation For Sample Input 2 :

The 'target' = 78 does not exist in the 'mat'. Therefore in the output, we see 'false'.

Constraints :

1 <= N <= 50
1 <= M <= 50
-10^5 <= mat[i], target <= 10^5

Time Limit: 1 sec