

mxn 행렬에서 값을 찾아내는 효율적인 알고리즘을 구현하라. 행렬은 왼쪽에서오른쪽, 위에서 아래 오름차순으로 정렬되어 있다.

Input: matrix = [[1,4,7,11,15],[2,5,8,12,19],[3,6,9,16,22],[10,13,14,17,24],[18,21,23,26,30]], target = 5

Output: true

1.이진 검색

import bisect

class Solution:

```
def searchMatrix(self, matrix: List[List[int]], target: int) -> bool:
    for m in matrix:
        if m[0] <= target <= m[-1]:
            i = bisect.bisect_left(m, target)
            if 0 <= i < len(m) and m[i] == target:
                return True
    return False
```

import bisect

class Solution:

```
def searchMatrix(self, matrix: List[List[int]], target: int) -> bool:
    if not matrix:
        return False
    row = 0
    col = len(matrix[0]) - 1
    while row <= len(matrix) - 1 and col >= 0:
        if target == matrix[row][col]:
            return True
        elif target < matrix[row][col]:
            col -= 1
        elif target > matrix[row][col]:
            row += 1
    return False
```

2.파이썬 다운

class Solution:

```
def searchMatrix(self, matrix: List[List[int]], target: int) -> bool:
    return any([target in m for m in matrix])
```