

74. Search a 2D Matrix

Medium

You are given an $m \times n$ integer matrix `matrix` with the following two properties:

Each row is sorted in non-decreasing order.

The first integer of each row is greater than the last integer of the previous row.

Given an integer `target`, return `true` if `target` is in `matrix` or `false` otherwise.

You must write a solution in $O(\log(m * n))$ time complexity.

Example 1

Input: `matrix =`

`[[1,3,5,7],[10,11,16,20],[23,30,34,60]]`

`target = 3`

Output: `true`

1	3	5	7
10	11	16	20
23	30	34	60

Example 2

Input: `matrix =`

`[[1,3,5,7],[10,11,16,20],[23,30,34,60]]`

`target = 13`

Output: `false`