

Problem 562: Longest Line of Consecutive One in Matrix

Problem Information

Difficulty: Medium

Acceptance Rate: 50.54%

Paid Only: Yes

Tags: Array, Dynamic Programming, Matrix

Problem Description

Given an $m \times n$ binary matrix `mat`, return the length of the longest line of consecutive one in the matrix.

The line could be horizontal, vertical, diagonal, or anti-diagonal.

Example 1:



Input: `mat = [[0,1,1,0],[0,1,1,0],[0,0,0,1]]` **Output:** 3

Example 2:



Input: `mat = [[1,1,1,1],[0,1,1,0],[0,0,0,1]]` **Output:** 4

Constraints:

$m == \text{mat.length}$ $n == \text{mat}[i].\text{length}$ $1 \leq m, n \leq 104$ $\text{mat}[i][j]$ is either 0 or 1.

Code Snippets

C++:

```
class Solution {  
public:  
    int longestLine(vector<vector<int>>& mat) {  
  
    }  
};
```

Java:

```
class Solution {  
    public int longestLine(int[][] mat) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def longestLine(self, mat: List[List[int]]) -> int:
```