Problem 221: Maximal Square

Problem Information

Difficulty: Medium
Acceptance Rate: 49.60%
Paid Only: No
Tags: Array, Dynamic Programming, Matrix

Problem Description

Given an `m x n` binary `matrix` filled with `0`'s and `1`'s, _find the largest square containing only_ `1`'s _and return its area_.

Example 1:

Input: matrix = [["1","0","1","0","0"],["1","0","1","1","1"],["1","1","1","1","1"],["1","0","0","1","0"]] **Output:** 4

Example 2:

Input: matrix = [["0","1"],["1","0"]] **Output:** 1

Example 3:

Input: matrix = [["0"]] **Output:** 0

Constraints:

* `m == matrix.length` * `n == matrix[i].length` * `1 <= m, n <= 300` * `matrix[i][j]` is `0` or `1`.

Code Snippets

C++:

```cpp
class Solution {
public:
    int maximalSquare(vector<vector<char>>& matrix) {


    }
};
```

Java:

```java
class Solution {
    public int maximalSquare(char[][] matrix) {


    }
}
```

Python3:

```python
class Solution:
    def maximalSquare(self, matrix: List[List[str]]) -> int:
```