Problem 1072: Flip Columns For Maximum Number of Equal Rows

Problem Information

Difficulty: Medium
Acceptance Rate: 78.56%
Paid Only: No
Tags: Array, Hash Table, Matrix

Problem Description

You are given an `m x n` binary matrix `matrix`.

You can choose any number of columns in the matrix and flip every cell in that column (i.e., Change the value of the cell from `0` to `1` or vice versa).

Return _the maximum number of rows that have all values equal after some number of flips_.

Example 1:

Input: matrix = [[0,1],[1,1]] **Output:** 1 **Explanation:** After flipping no values, 1 row has all values equal.

Example 2:

Input: matrix = [[0,1],[1,0]] **Output:** 2 **Explanation:** After flipping values in the first column, both rows have equal values.

Example 3:

Input: matrix = [[0,0,0],[0,0,1],[1,1,0]] **Output:** 2 **Explanation:** After flipping values in the first two columns, the last two rows have equal values.

Constraints:

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

Code Snippets

C++:

```
class Solution {
public:
int maxEqualRowsAfterFlips(vector<vector<int>>& matrix) {

}
};
```

Java:

```
class Solution {
public int maxEqualRowsAfterFlips(int[][] matrix) {

}
}
```

Python3:

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