

2732. Find a Good Subset of the Matrix

Description

You are given a **0-indexed** `m x n` binary matrix `grid`.

Let us call a **non-empty** subset of rows **good** if the sum of each column of the subset is at most half of the length of the subset.

More formally, if the length of the chosen subset of rows is `k`, then the sum of each column should be at most `floor(k / 2)`.

Return *an integer array that contains row indices of a good subset sorted in ascending order*.

If there are multiple good subsets, you can return any of them. If there are no good subsets, return an empty array.

A **subset** of rows of the matrix `grid` is any matrix that can be obtained by deleting some (possibly none or all) rows from `grid`.

Example 1:

```
Input: grid = [[0,1,1,0],[0,0,0,1],[1,1,1,1]]
Output: [0,1]
Explanation: We can choose the 0th and 1st rows to create a good subset of rows.
The length of the chosen subset is 2.
- The sum of the 0th column is 0 + 0 = 0, which is at most half of the length of the subset.
- The sum of the 1st column is 1 + 0 = 1, which is at most half of the length of the subset.
- The sum of the 2nd column is 1 + 0 = 1, which is at most half of the length of the subset.
- The sum of the 3rd column is 0 + 1 = 1, which is at most half of the length of the subset.
```

Example 2:

```
Input: grid = [[0]]
Output: [0]
Explanation: We can choose the 0th row to create a good subset of rows.
The length of the chosen subset is 1.
- The sum of the 0th column is 0, which is at most half of the length of the subset.
```

Example 3:

```
Input: grid = [[1,1,1],[1,1,1]]
Output: []
Explanation: It is impossible to choose any subset of rows to create a good subset.
```

Constraints:

- `m == grid.length`
- `n == grid[i].length`
- `1 <= m <= 104`
- `1 <= n <= 5`
- `grid[i][j]` is either `0` or `1`.

