时间限制：C/C++/Rust/Pascal 2秒，其他语言4秒
空间限制：C/C++/Rust/Pascal 512 M，其他语言1024 M
64bit IO Format: %lld

题目描述

Given an $n \times m$ binary matrix where 1 represents a black cell and 0 represents a white cell. Every second, each black cell will convert its four neighboring white cells (top, bottom, left, right) to black.

You may change **at most** one white cell to black (convert 0 to 1) to minimize the time required for the entire matrix to become completely black. Find this minimum time.

输入描述：

The first line contains two integers n and m ($1 \leq n \times m \leq 2 \times 10^5$), representing the number of rows and columns of the matrix.

The next n lines each contain m digits (0 or 1), representing the initial state of the matrix.

输出描述：

Output a single integer representing the minimum time required to turn the entire matrix black after adding one black cell.

示例1

输入 复制

```
3 3
0 0 0
0 0 0
0 0 1
```

输出 复制

```
2
```

C++ clang++18

1

ACM模
请通过代
式请参考
境详情

运行结果 自测输入