Problem E. Bomb

Input file:	`bomb.in`
Output file:	`bomb.out`
Time limit:	1 second
Memory limit:	128 megabytes

Earthlings and aliens are fighting for Mars. The battle goes on a rectangular grid of cells of size $N \times M$. Each cell is wholly owned by one of the parties. Earthlings may create a bomb destroying every cell in some rectangular area on the battlefield, and sides of this area are parallel to sides of battlefield. Bomb can not be rotated and used outside of the battlefield. Bomb can be used unlimited number of times. Of course, humans do not want to destroy their own cells, however they can create a bomb with only a certain size. Calculate bomb with maximal affected area (i.e. the product of the height and width), such that it is possible to destroy all cells of aliens and do not destroy any Earthlings cell. Any alien cell can be destroyed multiple times.

Input

First line of input contains two integers N, M ($1 \leq N, M \leq 2\,500$), separated by space, where N and M — height and width of battlefield correspondingly. Then N lines each one by M symbols follows, defining battlefield. If symbol in given line is «0», then corresponding cell belongs to Earthlings, otherwise if symbol is «1», then cell belongs to aliens.

Output

Output one integer - the maximal area of bomb destruction

Scoring

This task contains exactly 100 tests:

1. In tests 1-6: $N = 1$ or $M = 1$.

2. In tests 7-16: $1 \leq N, M \leq 20$.

3. In tests 17-26: $1 \leq N, M \leq 100$.

4. In tests 27-36: $1 \leq N, M \leq 450$.

5. In tests 37-100: $1 \leq N, M \leq 2500$.

For each successfully passed test participant get 1 point.

Example

bomb.in	bomb.out
5 6 001000 111110 111110 111110 000100	3

Note

In sample test size of optimal bomb is 3×1.