Problem E
Selling a Land

Input file: *testdata.in*
Time limit: 2 seconds

Problem Description

A farmer has a rectangular land in the Potato and Tomato Country, which
can be represented as an M by N matrix. There are some rocks in his land,
each of them has a weight. Here we assume the rocks are all occupy area of
1 by 1 unit square, so one rock can be represented in the matrix by denoting
its weight at the corresponding matrix element.

The farmer now wishes to find out a rectangular space of his land for sell,
so that the space is most valuable. The selling price of a land is defined as
the area of the space minus the sum of weights of the rocks in the space.
Please help him to find the maximum possible selling price.

Technical Specification

- $1 \le M, N \le 300$

- $1 \le$ weight of a rock ≤ 8000

- We only consider rectangular spaces that are either horizontal or vertical, and we cannot partially sell a land of a unit square.

Input Format

There are multiple test cases (at most 20). For each case, there will be two
integers M and N at its first line. In the following M lines there will be N

integers on every line, separated by one or more spaces, to represent the land the farmer owns:

- The weight of the rock if there there is a rock at that place.

- Zero if there is not a rock.

Output Format

For each test case output the maximum possible selling price in its own line.

Sample Input

```
3 3
0 1 0
0 1 0
0 1 0
3 3
0 1 0
0 1 0
0 3 0
2 3
2 2 2
2 2 2
5 5
0 0 0 0 0
0 0 0 0 0
0 0 5 5 0
0 0 0 0 0
0 0 0 0 0
5 5
0 0 0 0 0
0 0 0 0 0
0 0 9 9 0
0 0 0 0 0
0 0 0 0 0
```

Sample Output

```
6
4
0
15
10
```