

Write a program that takes two integers N (N between 2 and 20, both inclusive) and M (M between 2 and 20, both inclusive). And then takes a matrix A with N rows and M columns. You start at the upper-left position and you need to output the size of the biggest strictly increasing sequence of elements going only down or to the right.

Example:

Case 1:

For the input provided as follows:

```
3 3
1 2 3
2 4 1
1 5 6
```

Output of the program will be:

5

Description of the output:

The biggest path goes like 1 -> 2 -> 4 -> 5 -> 6, having total size of 5.

Case 2:

For the input provided as follows:

```
2 2
1 0
2 1
```

Output of the program will be:

2

Description of the output:

The biggest path goes like 1 -> 2, having total size of 2.