

## Q5: Anything You Can Do, I Can Do Better

A matrix  $M$  of integer values with  $R$  rows and  $C$  columns may contain a *saddle point*. A saddle point is a value in the matrix which is simultaneously the largest value in its column **and** the smallest value in its row. The matrix with  $R=3$  rows and  $C=4$  columns shown on the right has a saddle point of 3, because this value is the largest value in its column while also being the smallest value in its row. A matrix may have no saddle point, as you can verify from the following matrix:

4	3	4	7
2	1	7	2
1	-2	0	1

1	3	5	7
7	3	1	5

While it is possible that a matrix may have multiple saddle points, one can prove that the values of all such saddle points is the same, so you do not have to consider the issue for this problem.

### Input

The first line of input contains an integer on a line by itself representing the number of rows,  $R$ . The second line of input contains an integer on a line by itself representing the number of columns,  $C$ . The next  $R$  lines of input each contains  $C$  integer values, separated by a single space, representing the input matrix  $M$ . Note that  $1 < R \leq 5$  and  $1 < C \leq 5$ .

### Output

If there is no saddle point in the input matrix  $M$  then output the string "NO SADDLE POINT" on a line by itself all in capital letters. Otherwise, output the integer value of the saddle point on a line by itself.

### Sample Input and Output

Input	Output
2 4 1 3 5 7 7 3 1 5	NO SADDLE POINT
3 3 1 2 3 4 5 6 7 8 9	7
5 5 4 -1 -4 -3 3 3 0 1 0 2 5 -2 4 -1 -7 1 0 3 0 3 2 -1 5 -2 8	0
2 2 1 1 2 2	2