Problem

Given a $N \times M$ chessboard, where every cell has a value assigned to it denoted by $A[i][j]$ (Cell in the ith row from top and j^{th} column from left).

Find the position (x, y) where we should place the rook, just the sum of cells which are under attack of rook is maximum possible. The rook can not attack the cell on which it is placed.

If there are more than one positions for (x, y), return the position where x is as minimum as possible. If there are more than one positions with equal x, return the position where y is as minimum as possible.

Note:

- 1 based indexing is followed.
- A rook can attack all the cells which are either in horizontal or vertical direction to the rook's position.

Input

- First line contains two space separated integers denoting N and M.
- Next N lines contains M space separated integers denoting the values of array A.

Output

Print two space separated integers x y denoting the rook's position.

Constrains

$$1 \leq N \times M \leq 10^6$$
$$1 \leq A[i][j] \leq 10^4$$

Sample Input	Sample Output
2 2 4 1 3 1	1 2

Time Limit: 1.5

Memory Limit: 256

Source Limit: