TC2016 - Programación Orientada a Objetos

APO2 - Saddle Point(Tutoring 24/7)

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The saddle point in a square matriz, is a cell that is the greatest in the row and at the same time the smallest in the column, or the smallest in the row and the greatest of the column. A square matriz NO always has a saddle point.

For a 3 x 3 matriz with the next integers:

142

981

376

The saddle point is the position [0][1], because the 4 is the greatest of the row 0 and the smallest of the column 1.

Input

The first line is the dimention of the matriz ($1 \le n \le 10$), after this comes the $n \times n$ integers of the matrix.

Output

In one line print the row and the column of the saddle point, if the matrix does not have, print -1 -1. Print a blank between the row and the column.

Sample Input

3

142

981

376

Sample Output

0 1