**Saddle Points**

Introduction

Detect saddle points in a matrix.

So say you have a matrix like so:

1 2 3

|---------

1 | 9 8 7

2 | 5 3 2 <--- saddle point at column 1, row 2, with value 5

3 | 6 6 7

It has a saddle point at column 1, row 2.

It's called a "saddle point" because it is greater than or equal to every element in its row and less than or equal to every element in its column.

A matrix may have zero or more saddle points.

Your code should be able to provide the (possibly empty) list of all the saddle points for any given matrix.

The matrix can have a different number of rows and columns (Non square).

Note that you may find other definitions of matrix saddle points online, but the tests for this exercise follow the above unambiguous definition.

## Getting Started

Make sure you have read the "Guides" section of the [C track](https://exercism.io/my/tracks/c) on the Exercism site. This covers the basic information on setting up the development environment expected by the exercises.

## Passing the Tests

Get the first test compiling, linking and passing by following the [three rules of test-driven development](http://butunclebob.com/ArticleS.UncleBob.TheThreeRulesOfTdd).

The included makefile can be used to create and run the tests using the test task.

make test

Create just the functions you need to satisfy any compiler errors and get the test to fail. Then write just enough code to get the test to pass. Once you've done that, move onto the next test.

As you progress through the tests, take the time to refactor your implementation for readability and expressiveness and then go on to the next test.

Try to use standard C99 facilities in preference to writing your own low-level algorithms or facilities by hand.