You are given an *n* x *n* 2D matrix representing an image.

Rotate the image by 90 degrees (clockwise).

**Note:**

You have to rotate the image [**in-place**](https://en.wikipedia.org/wiki/In-place_algorithm), which means you have to modify the input 2D matrix directly. **DO NOT** allocate another 2D matrix and do the rotation.

**Example 1:**

Given **input matrix** =

[

[1,2,3],

[4,5,6],

[7,8,9]

],

rotate the input matrix **in-place** such that it becomes:

[

[7,4,1],

[8,5,2],

[9,6,3]

]

**Example 2:**

Given **input matrix** =

[

[ 5, 1, 9,11],

[ 2, 4, 8,10],

[13, 3, 6, 7],

[15,14,12,16]

],

rotate the input matrix **in-place** such that it becomes:

[

[15,13, 2, 5],

[14, 3, 4, 1],

[12, 6, 8, 9],

[16, 7,10,11]

]