*Note: Try to solve this task in-place (with O(1)additional memory), since this is what you'll be asked to do during an interview.*

You are given an n x n 2D matrix that represents an image. Rotate the image by 90 degrees (clockwise).

Example

For

a = [[1, 2, 3],

[4, 5, 6],

[7, 8, 9]]

the output should be

rotateImage(a) =

[[7, 4, 1],

[8, 5, 2],

[9, 6, 3]]

Input/Output

* **[execution time limit] 4 seconds (js)**
* **[input] array.array.integer a**

*Guaranteed constraints:*  
1 ≤ a.length ≤ 100,  
a[i].length = a.length,  
1 ≤ a[i][j] ≤ 104.

* **[output] array.array.integer**

**[JavaScript (ES6)] Syntax Tips**

// Prints help message to the console

// Returns a string

**function** **helloWorld**(name) {

console.log("This prints to the console when you Run Tests");

**return** "Hello, " + name;

}