Last night you had to study, but decided to party instead. Now there is a black and white photo of you that is about to go viral. You cannot let this ruin your reputation, so you want to apply *box blur* algorithm to the photo to hide its content.

The algorithm works as follows: each pixel x in the resulting image has a value equal to the average value of the input image pixels' values from the 3 × 3square with the center at x. All pixels at the edges are cropped.

As pixel's value is an integer, all fractions should be rounded down.

**Example**

For

image = [[1, 1, 1],

[1, 7, 1],

[1, 1, 1]]

the output should be boxBlur(image) = [[1]].

In the given example all boundary pixels were cropped, and the value of the pixel in the middle was obtained as (1 + 1 + 1 + 1 + 7 + 1 + 1 + 1 + 1) / 9 = 15 / 9 = *~rounded down~* = 1.

**Input/Output**

* **[time limit] 3000ms (cs)**
* **[input] array.array.integer image**

An image is stored as a rectangular matrix of non-negative integers.

*Constraints:*  
3 ≤ image.length ≤ 10,  
3 ≤ image[0].length ≤ 10,  
0 ≤ image[i][j] ≤ 255.

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

A blurred image.

<https://codefights.com/arcade/code-arcade/waterfall-of-integration/5xPitc3yT3dqS7XkP>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static int[][] boxBlur(int[][] image)

{

/\* instancio cada fila de res e inicializo cada uno

\* de sus elementos a cero\*/

int[][] res = new int[image.Length-2][];

for (int i = 0; i < image.Length - 2; i++)

{

res[i] = new int[image[i].Length - 2];

for (int j = 0; j < image[i].Length - 2; j++)

{

res[i][j] = 0;

}

}

for (int i = 1; i < image.Length - 1; i++)

{

for (int j = 1; j < image[i].Length - 1; j++)

{

/\*hago la sumatoria de los 9 casilleros

con centro i,j y divido esa sumatoria por 9\*/

int pixel = (image[i - 1][j - 1] + image[i - 1][j] + image[i - 1][j + 1]

+ image[i][j - 1] + image[i][j] + image[i][j + 1]

+ image[i + 1][j - 1] + image[i + 1][j] + image[i + 1][j + 1]) / 9;

res[i - 1][j - 1] = pixel;

}

}

return res;

}

static void Main(string[] args)

{

int[][] image =

{

new int[]{36,0,18,9},

new int[]{27,54,9,0},

new int[]{81,63,72,45}

};

int[][] res = boxBlur(image);

for (int i = 0; i < res.Length; i++)

{

for (int j = 0; j < res [i].Length; j++)

{

Console.Write(res[i][j] + " ");

}

Console.WriteLine();

}

Console.ReadLine();

}

}

}