

BACK

Box Blur



DESCRIPTION

SOLUTIONS 11118

COMMENTS 81



CODEWRITING

SCORE: 300/300

Last night you partied a little too hard. Now there's a black and white photo of you that's about to go viral! You can't let this ruin your reputation, so you want to apply the *box blur algorithm* to the photo to hide its content.

The pixels in the input image are represented as integers. The algorithm distorts the input image in the following way: Every pixel x in the output image has a value equal to the average value of the pixel values from the 3×3 square that has its center at x , including x itself. All the pixels on the border of x are then removed.

Return the blurred image as an integer, with the fractions rounded down.

Example

For

```
image = [[1, 1, 1],
         [1, 7, 1],
         [1, 1, 1]]
```

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

To get the value of the middle pixel in the input 3×3 square: $(1 + 1 + 1 + 1 + 7 + 1 + 1 + 1 + 1) = 15 / 9 = 1.66666 = 1$. The border pixels are cropped from the final result.

For

```
image = [[7, 4, 0, 1],
         [5, 6, 2, 2],
         [6, 10, 7, 8],
         [1, 4, 2, 0]]
```

the output should be

```
boxBlur(image) = [[5, 4],
                  [4, 4]]
```

There are four 3×3 squares in the input image, so there should be four integers in the blurred output. To get the first value: $(7 + 4 + 0 + 5 + 6 + 2 + 6 + 10 + 7) = 47 / 9 =$

