@LeetCode

Given a 2D integer matrix M representing the gray scale of an image, you need to design a smoother to make the gray scale of each cell becomes the average gray scale (rounding down) of all the 8 surrounding cells and itself. If a cell has less than 8 surrounding cells, then use as many as you can.

**Example 1:**

**Input:**

```
[[1,1,1],
 [1,0,1],
 [1,1,1]]
```

**Output:**

```
[[0, 0, 0],
 [0, 0, 0],
 [0, 0, 0]]
```

**Explanation:**

```
For the point (0,0), (0,2), (2,0), (2,2): floor(3/4) = floor(0.75) = 0
For the point (0,1), (1,0), (1,2), (2,1): floor(5/6) = floor(0.83333333) = 0
For the point (1,1): floor(8/9) = floor(0.88888889) = 0
```

**Note:**

1. The value in the given matrix is in the range of [0, 255].
2. The length and width of the given matrix are in the range of [1, 150].