Problem 1. Given the following image I

1	0	1	1	0	1	1	0
0	1	0	1	0	1	1	0
1	0	0	1	1	1	1	0
1	0	1	0	1	0	1	1
1	0	1	0	1	0	1	1
0	1	1	0	0	0	0	1
0	1	1	1	0	1	0	1
1	1	0	1	0	1	0	0

And the structure element J:

1	0	1
0	1	0
1	0	1

Perform the closing of image I by structuring element J. Note that zero padding is applied at the boundary pixels.

Problem 2.
Given the following image M

1	2	1	9	2	1
4	4	3	5	4	0
6	9	2	5	2	1
6	2	0	3	3	0
3	4	0	2	1	5
5	6	8	3	3	6

Convert the image M to a binary using the thresholding value T, where T1 is the closet integer number to coverage of all the pixel values of image M.