

Marks: 10

Implement a Matlab program for the following problems.

1. Consider the image 'wire_bond.tif'. Erode the image by the following structuring element:

$$B = \begin{bmatrix} 0 & 1 & 0 \\ 1 & 1 & 1 \\ 0 & 1 & 0 \end{bmatrix}$$

Display the result.

2. Consider the image 'finger_print'. Dilate the image by a 11×11 square structuring element and display the result.
3. Perform closing operating on the image 'finger_print.tif' and display the result.