

Assignment No. 4

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Part B - Programming Part- Morphological image processing

(Q3) As given in the question after applying the Morphological Operation on the grey scale image we get some sort blurred image with dark part gets highlighted after applying the erosion on the image and the dark part in the image gets removed after applying the dilation on the grey scale image. As given in the image results we see that the dark parts in the image gets highlighted.

1) Original Image-



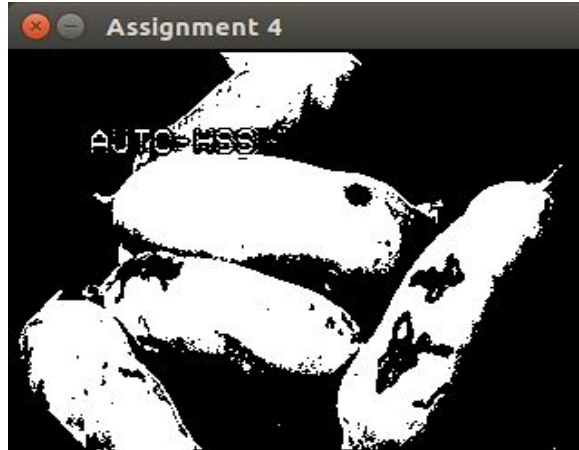
Your implementation:

(1) (5%) Obtain image I, and convert it into binary image F for Display.

I



F



(2) (25%) Design your algorithm to separate the objects in the given image (hint: using morphological operation)

Algorithm:

Use the thresholding algorithm to obtain a binary image. The Optimal threshold is 185.

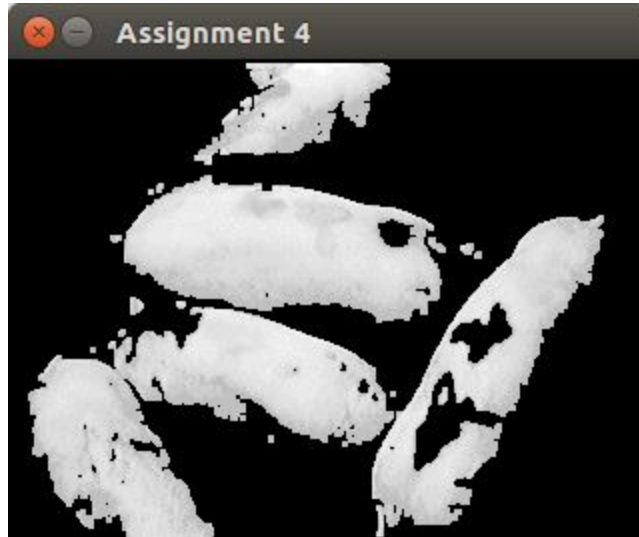
Implement several morphological operations such as dilation, erosion, opening

we can determine and verify get a total of 5 pig

(3) (10%) Apply the morphological operations on the original grey scale image directly, you need to report your result and explain your algorithm.

Opening

grayscale after morphological



(4) Write-up (10%): Print out the binary image F and the image after the morphological operation. Show your structuring elements and explain your algorithms (approaches) in the Report.

F

binary after morphological



