

Lab 7 summary

Exercise one:

- as a choice, the structuring element will be passed as a Mat argument, in case it will have a different shape than 4/8 neighbors
- going through each pixel and placing the structuring element on it to make all the pixels that are black in the structuring element object pixels in the destination image as well – dilation
- going through each pixel to check if the object pixel in the struct. el. are black in the source image as well -> if yes, the pixel is black, else, it's white – erosion
- apply erosion then dilation – opening
- apply dilation then erosion – closing
- a wrapper function will build the structuring element as requested in the exercise

Exercise two:

- create new functions, like the previous wrapper functions, that apply the operations n times

Exercise three:

- implement image subtraction
- subtract the eroded image from the original image

Exercise four:

- implement union, intersection and complement
- from a starting pixel (problem appeared here as I didn't know how to find a pixel inside the contour – good enough if the center of the image is considered)
- apply the given transformations until there is no change in the image