Assignment 5

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- Develop a program which performs various kinds of thresholding
  - Use ‘finger_print.png’, ‘adaptive_1.jpg’, ‘adaptive.png’
  - Read all images as gray-scale images
  - For ‘finger_print.png’, set finger print region to 0 and background region to 255
  - For ‘adatpve_1.jpg’, and ‘adaptive.png’, set character region to 0 and background region to 255

Assignment 5

- Your program should display three windows
  - ‘finger_print’, ‘adaptive_1’, ‘adaptive’
  - Each window should display thresholding result

Exercise 6

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Exercise 6

Calculate the thresholding result when the following function is executed

threshold(Input, Result, 195,200,THRESH_BINARY)

Input

10	30	170	180
30	50	210	220
230	240	160	180
250	250	170	180

Result

Exercise 6

Calculate the thresholding result when the following function is executed

threshold(Input, Result, 127,255, THRESH_TOZERO)

Input

10	30	170	180
30	50	210	220
230	240	160	180
250	250	170	180

Result

Exercise 6

Calculate the thresholding result for the pixel in red when the following function is executed

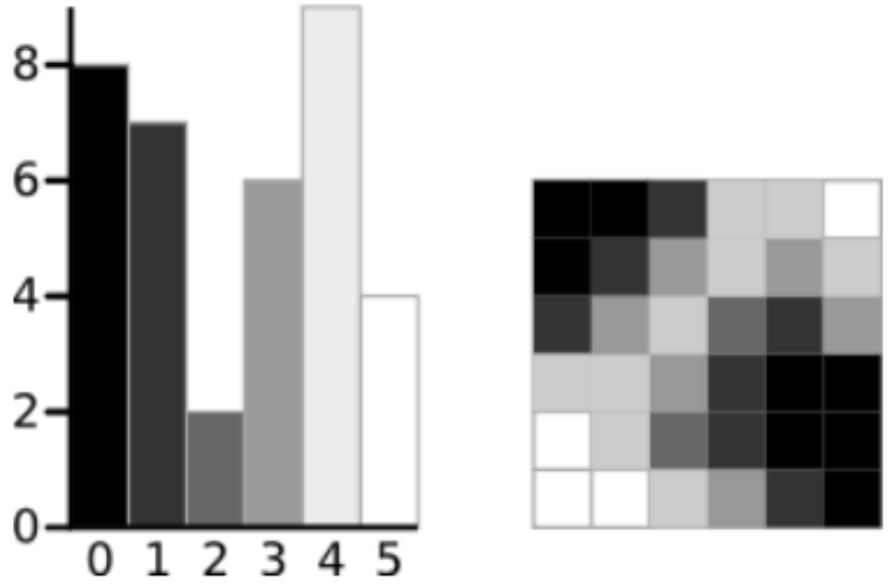
adaptiveThreshold(input,Result, 255, ADAPTIVE_THRESH_MEAN_C, THRESH_BINARY, 3, 5);

Input

10	30	170	180
30	50	210	220
230	240	160	180
250	250	170	180

Exercise 6

Calculate the within-class variance when the threshold is set to 3. So, class 1 is consists of pixels with the value of 0~2 and class 2 consists of pixels with the value of 3~5



http://www.labbookpages.co.uk/software/imgProc/otsuThreshold.html