Continuous Evaluation 4(CE4)

AIM: To compare the utility of Global Thresholding method and Otsu Alogorithm.

Instruction: Submit only one python file “yourname.py.” You may refer to sec 10.3 of Gonzalez book for comparing your results.

(a) Given an input image “fingerprint.tif” compute its histogram. Generate a binary image in which background pixels are labelled as 1 (Gray scale value 255) and foreground pixels are labelled as 0 (Gray scale value 0). The threshold required should be computed using Global Thresholding method and Otsu Algorithm. Your code should plot the binary image obtained in each case. Also print the value of threshold used in each case.

(b) Given an input image “polymersomes.tif” compute its histogram. Generate a binary image in which background pixels are labelled as 1 (Gray scale value 255) and foreground pixels are labelled as 0 (Gray scale value 0). The threshold required should be computed using Global Thresholding method and Otsu Algorithm. Your code should plot the binary image obtained in each case. Also print the value of threshold used in each case.