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*                   IMAGE PROCESSING (e-Yantra 2014)
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*  This software is intended to teach image processing concepts
*
*  MODULE: Functions
*  Filename: Thresholding.pdf
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*  Author: Arun Mukundan, e-Yantra Project, Department of Computer Science
*  and Engineering, Indian Institute of Technology Bombay.
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Thresholding

Thresholding is a technique used to create a binary image from an existing image by assigning either of two values based on the comparison of the intended threshold value and the pixel value.

For example, supposing the image we are Thresholding is a grayscale image. Then each of the pixels has a value ranging from 0 to 255. Let us assume that the intended threshold value is 150. Then those pixels in the image that have a value equal to or below 150 are set to 0 and those above are set to 255. Thus the resulting image has pixels that are either black(0) or white(255).

Command:

ret, dst = cv2.threshold(src, thresh, maxval, type)

ret → Return value

dst →The thresholded image

src →The source image

thresh →The intended threshold value

maxval →The value to the pixels above the threshold are set to

type →Type of Thresholding - THRESH_BINARY, THRESH_BINARY_INV, THRESH_TRUNC, THRESH_TOZERO, THRESH_TOZERO_INV

As a graph, the different types of thresholding may be represented as follows: (from OpenCV Doc.)