INDIAN INSTITUTE OF TECHNOLOGY ROPAR
DEPARTMENT OF ELECTRICAL ENGINEERING,
RUPNAGAR-140001, PB, INDIA

Course Number	**: EE638 (3-0-0)**
Course Title	**: Digital Image Processing**
Instructor	**: Dr. Subrahmanyam Murala**
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Assignment-III

Perform the following operations on Images 1.jpg, 2.jpg and 3.jpg using MATLAB/Python.

1. Histogram Equalization using inbuilt command→Apply the thresholding operation. Preform the following on the resultant response.
   (a) Dilation
   (b) Erosion
   (c) Opening
   (d) Closing
   (e) Boundary detection
   (f) Top-hat on Histogram equalized image.
   (g) Bottom-hat on Histogram equalized image.

2. Perform the three level Haar Wavelet transform on the histogram equalized image. Compare the results of your implementation with the inbuilt Haar wavelet (DB1) in terms of PSNR (peak signal to noise ratio) (You can use inbuilt command for PSNR calculation).

Main File/Function name : FirstThreeLettersOfYourName_EnNo_AG3.m
Sub File/Function names : FirstThreeLettersOfYourName_EnNo_Method.m

Plagiarism % : less than 40%

Submissions after the deadline will not be considered.