

# Digital Image Processing

## Lab Assignment – 2

Read the given images and perform the following operations:

1. Perform Histogram Equalization for the input “image1”.
2. Perform Histogram specification/matching for the “image2”. Take the histogram of “image3” as the specified histogram.
3. Apply 3x3 and 5x5 median filter on “image3” and “image4” (apply both masks on both the images).
4. Apply 3x3 and 5x5 mean filter on “image3” and “image4” (apply both masks on both the images).
5. Apply the following weighted mean filter on “image3” and “image4” -

$$\frac{1}{16} \begin{bmatrix} 1 & 2 & 1 \\ 2 & 4 & 2 \\ 1 & 2 & 1 \end{bmatrix}$$

**Note:** Convert the color image to grayscale image if required.