

# EE-608:DIGITAL IMAGE PROCESSING

## Lab Assignment 4

(Warning : Don't use chatgpt)

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### AIM:

- 1) Write a function to calculate Manhattan distance, Euclidean distance and L-infinity norm between same size RGB images.
- 2) Take two same size images, Binarize the image using some threshold, Now apply logical operations on them.
- 3) Take two images, apply arithmetic operations on them. Take care of out of bound values and zero division errors.

Doubts: You can approach us. Use leena image only. Libraries: Opencv to read or write image

Matplotlib to display image

Numpy wherever

necessary Basic python

functions

### Deliverables:

**Just give a concise report of what you understand in your own words, not too heavy theory taken from the web.**

- 1) Write a python or matlab code to implement above given tasks.
- 2) Analyze the tasks clearly and the mathematics behind the task.
- 3) Plot the results and make a report of results and observations.