Image and Video Processing
Lab Assignment 2
IIIT Allahabad

Q1) Create two 10x10 2D arrays and perform the following operations on them using numpy:

a. Matrix multiplication

b. Inverse both matrices

c. Covariance

d. Compare both matrices

e. Flatten the matrices using ravel, reshape and flatten

f. Add border around the matrices

Q2) Choose a color image of your choice and perform the following operations on them:

a. Convert it into grayscale image using numpy.

b. Scale the image by a factor of 2.

c. Rotate the image 75 degrees in right direction