Tutorial – Week 2

Given a grayscale image ('lena512.bmp') and a color image ('lena512color.tiff'), write a matlab program to do the following tasks

1. Read the images and display them
2. Basic operations on the images
    a. Convert the color image to grayscale
    b. Convert the grayscale image into a binary image
    c. Negative the grayscale image
    d. Write a function that return 3 channels (R, G, and B) of the color image as 3 new images
    e. Extract a subimage size M x N centering at (x, y)
    f. Write two functions to flip an image vertically and horizontally *
    g. Write a function to rotate an image 90 degree left or right **
3. Display all the result images together with the original images in the same figure
4. Save all the result images into files
5. Display the information of the result images