CV Lab Assignment-1

(you can use opencv library of python)

1. Read and write the dimensions of an image (any image).

2. Perform following operations on an image:

a)   Grayscale conversion.
b)   Find the index of pixels having value equal to 6 in both images.
c)   Identify and display the value of darkest pixel in both the images.
d)   Modify the above image by replacing the square (31x31) around darkest pixel with the white pixels.
e)   In the above image (2 d), make a gray square with pixel value 100 at the center of this image.

3. Compute the average pixel value for each channel R, G, and B then subtract the average value per channel for the above image (used in q1).

4. Perform basic transformation on an image: Apply padding in case of loss of data.

A)   Rotation 30 degree
B)   Scaling by factor 2
C)   Shifting (0,0) to (10, 10)
D)   Filtering to detect edges.