

# Digital Image Processing

## Lab Assignment – 3

1. What will be the effect of applying Roberts cross gradient operators on 'image1.jpg'?

$$\begin{bmatrix} -1 & 0 \\ 0 & 1 \end{bmatrix} \text{ AND } \begin{bmatrix} 0 & -1 \\ 1 & 0 \end{bmatrix}$$

*Roberts operators*

2. Convert 'image2.png' from RGB color model to HSI color model.
3. Generate three binary images of size 64x64 as shown in Figure 1 and apply 3x3 averaging mask on each of them. Also draw the histograms of the blurred images.

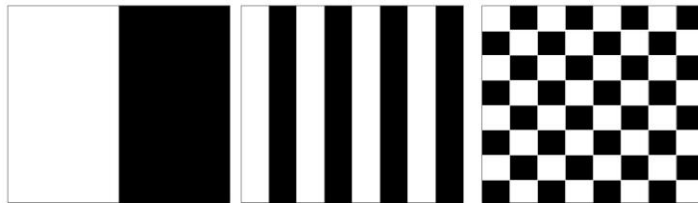


Figure 1