Assignment II

Image Processing, Date: 21 April 2020

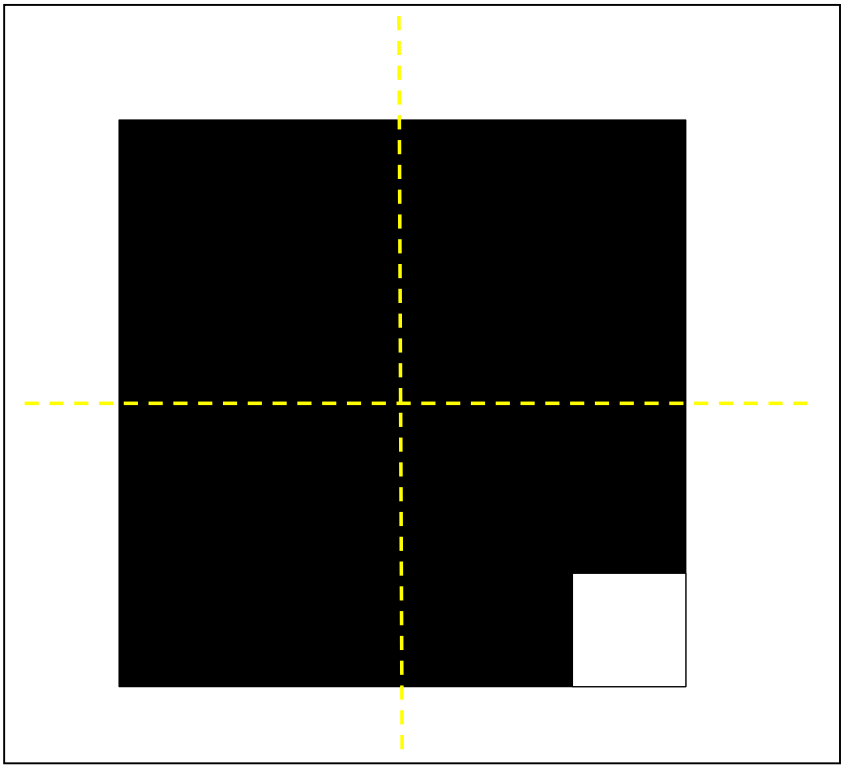
Question:

Apply DCT to the image "cameraman.tif". Drop the values to zero of the transformed image in the region (3rd quadrant, white square) as shown in the figure below. If the dimension of the image is MxM, consider 20% of the size of the white square in the 3rd quadrant to drop to zero value. Take the inverse transformation and calculate the absolute value of error : Err=(abs(original matrix – reconstructed matrix).

Display the following item in the code:

1. Original image (figure(1))
2. Reconstructed image after dropping the values as suggested above (figure(2))
3. Error (figure(3))

Submit only the code (*.m) file.



If the dimension of the input image is MxM, the white square in the 3rd quadrant has dimension 20% of M. Drop the values of the transformed matrix to zero in the region indicated by white square.