Project #2

assign November 2, 2020 due November 7, 2020

Consider the centered DFT for Bird 2.tif, re-synthesize the images using the DFT coefficients (1) inside (r < 30), and (2) outside ($r \ge 30$) the circular region with radius=30 pixels (based on the original image size), plot the resulted images.

Your report (Word or pdf format) should contain:

- Source codes (30%)
- Plot of DFT magnitude in Log scale (20%)
- Image constructed by DFT coefficients inside the circular region with radius = 30 pixels (15%)
- Image constructed by DFT coefficients outside the circular region with radius = 30 pixels (15%)
- Table of top 25 DFT frequencies (u,v) in the left half frequency region $(0 \le u \le M-1, 0 \le v \le N/2-1)$ (20%)

Upload your report to new e3 before 23:55 of due date!