

BIL – 421 IMAGE PROCESSING PROGRAMMING ASSIGNMENT # 3

Due Date: **May 23, 2014 till 23:59 pm**

Submission: **Moodle Upload**

Problem) Web-Safe Colors

In order to complete this homework, you need to generate the RGB component images for a given tif color image. For example, MATLAB's Image Processing Toolbox can do this, but you can also do it with image editing programs like Adobe's Photo-Shop or Corel's PhotoPaint. It is acceptable for the purposes of this project to convert an image to RGB (and back) manually.

(a) Write a MATLAB program that converts an arbitrary RGB color image to a web-safe RGB image (see Fig. 6.10 for a definition of web-safe colors).

(b) Download the image in Fig. 6.8 from the book web site and convert it to a web-safe RGB color image. Figure 6.8 is given in tif format, so convert your result back to tif. Explain the differences between your result and Fig. 6.8

NOTES:

- 1)** Make the necessary research on web-safe RGB colors.
- 2)** Give explanations / comments about your source code **in Turkish**.
- 3)** Give meaningful variable names.
- 4)** Submit your source files (.m files) only. Do not submit your input / output files (images)