

CENG 525 HW 1

Announcement Date : 19.10.2019

Due Date : 30.10.2019 – Presentation in class

Issues:

- Write code (any language you prefer) in order to perform tasks required for each question and **show** the result **properly**.
- All associated deliverables must be submitted in a zip file named 'YourID_YourName.zip'
- The code must be in a form that is directly executable (i.e. the zip file must contain all data or other scripts required and the results **must** be displayed automatically)
- The main file of the bundle must be specified (i.e. main.cpp or main.m).
- This is an individual work. Scripts having even a single line in common will be discarded.

- 1) Apply power law transformation (with $c = 1$, $\gamma = 0.4$) to the image 'question_1.tif'.
- 2) Perform histogram equalization to the image 'question_2.tif'. Note that you are not allowed to use any off-the-shelf histogram equalization functions.
- 3) By defining a target histogram by yourself, perform histogram matching to the image 'question_3.tif'. Note that you are not allowed to use any off-the-shelf histogram matching functions.
- 4) Apply the following spatial domain Sobel mask to the image 'question_4.tif' using convolution. Note that you are not allowed to use any off-the-shelf convolution functions.

-1	0	1
-2	0	2
-1	0	1