HOMEWORK 4
COMP 4687 – Introduction to Computer Vision

Image Transformations

Use one-of-the-three image outputs of your HOMEWORK #2. Please name this image as "**yourSurname.png**"

For example,
Devrim Akca
209CE2345

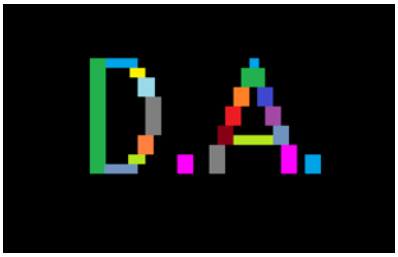

Image file name: **Akca.png**

This **yourSurname.png** image file will be the input image of your HOMEWORK #4.
Apply the following operations and display the results as an image after each step.
You can use Matlab functions. Write everything in a single matlab.m file.

1) Use **rgb2gray()** method to convert the **yourSurname.png** 24-bit image to a grey scale image.

2) Rotate this grey scale image by 75 degrees using the "bilinear" interpolation method. Use **imrotate()** method.

3) Scale the output image of Step 2) by factor "1.25". Use **imresize()** method.

4) Apply the histogram equalization operation to the output image of Step 3). Use **histeq()** method.

HW4_1

Write all operations in a single Matlab script.
File naming should follow the below format:
Surname_Name_StudentID_LectureCode_HW4_1.m
Example: **Akca_Devrim_212CE2345_Comp4687_HW4_1.m**

Please upload your Matlab file and input image file (**yourSurname.png)** to "**Ödevler (HWs / Projects)**" section under the BlackBoard system.
Please use the "HW4" assignment link.
The deadline is until **November 25, 2024, Monday, 10:00 pm**.
All homework will be accepted by the Assignment link. Please do not sent your homework through e-mail.

Please do not send a compressed file (zip, rar, etc.). Upload each file separately.

Please prepare your homework alone. It is a self-study.

We use a special “code-checker” which can automatically detect all similar Matlab files. Do not make a copy/paste from an external source.

GRADING

Submitting the homework Matlab file		+ 30
Submitting the input image file		+ 10
All correct answers		+ 60
Copy (Exactly same)		= 1
Copy (similar or identical)		= 10
Mistake in the Matlab file name		- 10
Mistake in the input image file name		- 10
Submitting a compressed file		- 10
Submitting a web link		- 20
Late submission	< 2 hour	- 20
	< 24 hours	- 40
	< 48 hours	- 60
	> 48 hours	= 0