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## BLG 453E Homework - 0

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Due 25.09.2017 22:00

**Policy:** Please do your homework on your own (Do not copy paste your solutions from the internet or your friends). The code and the report you submitted must be your own work. All code must be implemented using **Python** programming language and **OpenCV Python wrapper**.

**For your questions:** albay@itu.edu.tr

1. (a) Get a picture of yourself taken preferably with good lighting (e.g. not in the shade). Make sure it is saved as a color image. Load your color image into your code and name it as Icolor.  
Display each channel (Red, Green, and Blue) and their two-by-two combinations (Red+Green, Red+Blue, Green+Blue) separately.  
(b) Create an average grayscale image from the color image of yourself and name it Igray. What is the range of this image (i.e. its min, max values)? With how many bits this image can be represented?  
(c) Flip your image horizontally and vertically to obtain your picture in a similar way as in the images of Figure 1.



Figure 1