

Assignment 02

Assignment Name: "Playing with Intensity Transformations"

Tasks you have to do to complete the assignment:

1. Take your RGB photo
2. Make it a grayscale image, say I
3. Calculate and plot histogram of image I
4. Take gamma value input from user, say $\gamma = 2.5$
5. Apply Power Law Transformation on image I with $c = 1.5$
6. Calculate and plot histogram of the Power Law transformed image
7. Take a threshold value input from user, say $A = 200$
8. Increase brightness by 50% for pixels with intensity smaller than A ; else decrease it by 25% of image I
9. Calculate and plot histogram of the thresholded image
10. Apply Log Transformation on image I with $c = 1.9$
11. Calculate and plot histogram of the log transformed image
12. Apply Negation Transformation on I
13. Calculate and plot histogram of the negative image
14. Understand the histograms, differences, their indications.

*****Note That:**

im2double: the function scales any integer **image values** to the range **[0,1]**.