Lab 03:

Low Contrast:



Probability Distribution Function:



Cumulative Distribution Function:



High Contrast:



Probability Distribution Function:



Cumulative Distribution Function:



Low contrast Histogram Equalization:



High contrast Histogram Equalization:



Code:

clc;

clear all;

close all;

I1 = imread('pout\_orig.jpg');

greyI1 = rgb2gray( I1(:,:,1:3) );

J1 = histeq(greyI1);

I2 = imread('tire\_orig.jpg');

greyI2 = rgb2gray( I2(:,:,1:3) );

J2 = histeq(greyI2);

[J,T] = imhist(greyI1);

pdf = J/sum(J);

figure(1);

plot(pdf);

cdf = cumsum(pdf);

figure(2);

plot(cdf);

figure(3);

subplot(121), imshow(greyI1), title('pout\_orig');

subplot(122), imhist(greyI1), title('histogram'),xlabel('num of intensity'),ylabel('num of bins');

figure(4);

subplot(121), imshow(greyI2), title('pout\_orig');

subplot(122), imhist(greyI2), title('histogram'),xlabel('num of intensity'),ylabel('num of bins');

[J3,T1] = imhist(greyI2);

pdf1 = J3/sum(J3);

figure(5);

plot(pdf1);

cdf1 = cumsum(pdf1);

figure(6);

plot(cdf);

figure(7);

imhist(J2);