*Editor>>*

clc;

clear all;

close all;

im1=imread('pout.tif'); %Image

subplot(2,2,1);

imshow(im1); %Display the Original Image

title('Original Image');

[row col]=size(im1); %Number of rows and Columns present in the image

subplot(2,2,2);

imhist(im1); %Histogram of the Original Image

xlabel('Gray Level or Intensity');

ylabel('Number of Pixels');

title('Histogram of Original Image');

handle=imhist(im1);

cdf=cumsum(handle); %Cumulative Distributive Function

normalized\_cdf=(1/(row\*col))\*cdf; %Normalization Of CDF

s=round(255\*normalized\_cdf); %Transfer function of the image

%Mapping Of Equalized Image

for i=1:row

for j=1:col

r=im1(i,j);

z=s(r+1);

im\_equ(i,j)=z;

end

end

im\_equ=uint8(im\_equ); %Conversion Of double into integer data type

subplot(2,2,3);

imshow(im\_equ); %Display the Equalized image

title('Equalized Image');

subplot(2,2,4);

imhist(im\_equ); %Histogram of New image

xlabel('Gray Level or Intensity');

ylabel('Number of Pixels');

title('Histogram of Equalized Image');

figure;

plot(s); %Plot the Transfer Function

xlabel('Old Intensity');

ylabel('New Intensity');

title('Transfer Function');

*Output>>*



