**Code 3a**

clc;

clear all;

close all;

a = imread('pout.tif');

[m,n] = size(a)

subplot(2,1,1);

stem(imhist(a))

title('USING imhist');

xlabel('GRAYSCALE');

ylabel('NUMBER OF PIXELS');

count = zeros(1,256);

for k = 0:255

for i = 1:m

for j = 1:n

if (a(i,j) == k)

count(k+1) = count(k+1) + 1;

end

end

end

end

subplot(2,1,2)

stem(count)

title('WITHOUT USING imhist');

xlabel('GRAYSCALE');

ylabel('NUMBER OF PIXELS');