Program:

%% Histogram %%

clc;
clear all;
close all;

a = imread('building.jpg');
subplot(3,2,1);
imshow(a);
title('Original Image');

b=rgb2gray(a);
subplot(3,2,2);
imshow(b);
title('Gray Image');
[m, n] = size(b);

for k = 1:256;
    N(k) = 0;
    for i = 1:m
        for j = 1:n
            if b(i,j) == k
                N(k) = N(k) + 1;
            end
        end
    end
end
subplot(3,2,3);
plot(N);
subplot(3,2,4);
imhist(b);
c = histeq(b);
subplot(3,2,5);
plot(c);
subplot(3,2,6);
imshow(c);

Output: