A6

i. Use histogram equalization to improve the contrast of an image of your choice. Explain why the contrast changed (or didn’t change). Show both the original and modified image and a histogram for both images.

ii. Convert a color image of your choice to black and white. Then, convert the black and white image to a binary image. Repeat the previous step, but use a different threshold value. Share both the original, the black and white image, and the two binarized images. Explain one reason that binarization might be used on an image.

A = imread(‘hestain.png’);

figure

subplot(1,2,1)

imshow(A)

subplot(1,2,2)

imhist(A,128)

%%

B = histeq(A);

figure

subplot(1,2,1)

imshow(A)

subplot(1,2,2)

imhist(B,128)

II

threshold =125;

a = imread(‘llama.jpg’);

imshow(a);

info=size(a);

m= first number, n= second number, c=3rd number

typedouble = double(a);

w = zeros(m,n,3);

temp1 = (typedouble(:,:,1) + typedouble(:,:,2) + typedouble(:,:3))/3;

temp2 = temp1 > threshold;

w(:,:,1) = 255 \* double(temp2);

w(:,:,2) = w(:,:,1);

w(:,:,3) = w(:,:,1);

bwimage = uint8(w);