**Adaptive Histogram equilization**

Histogram equalization of a coloured image

x=imread('teddy.jpg');

subplot(3,2,1);

imshow(x);

title('Original Image');

subplot(3,2,2);

imhist(x);

title('Original Image');

j=histeq(x);

subplot(3,2,3);

imshow(j);

title(' after Global histogram equalization');

subplot(3,2,4);

imhist(j);

title(' after Global histogram equalization');

j=adapthisteq(x);

subplot(3,2,5);

imshow(j);

title('Image after Local histogram equalization');

subplot(3,2,6);

imhist(j);

title('after local histogram equalization');

Histogram equalization of a black and white image

x=imread('flowers.jpg');

subplot(3,2,1);

imshow(x);

title('Original Image');

subplot(3,2,2);

imhist(x);

title('Histogram of Original Image');

j=histeq(x);

subplot(3,2,3);

imshow(j);

title('Image after Global histogram equalization');

subplot(3,2,4);

imhist(j);

title('Histogram after Global histogram equalization');

j=adapthisteq(x);

subplot(3,2,5);

imshow(j);

title('Image after Local histogram equalization');

subplot(3,2,6);

imhist(j);

title('Histogram after Loacal histogram equalization');