**โปรแกรม Frequency Filtering**

clc

clear

im = rgb2gray(imread('C:\Users\Ruk\Desktop\pic\18.jpg'));

figure,imagesc(im),colormap gray;

fftim = fftshift(fft2(double(im)));

mag = abs(fftim);

figure,imshow(mag, []);

figure,imshow(log(1 + mag), []);

n=1;

d=50;

h=size(im,1);

w=size(im,2);

[x y]=meshgrid(-floor(w/2):floor(w/2)-1,-floor(h/2):floor(h/2)-1);

hhp=1./(1+(d./(x.^2+y.^2).^0.5).^(2\*n));

hlp=1-hhp;

figure,imshow(hhp);

hpfftim = fftim .\* hhp;

hpim = uint8(real(ifft2(ifftshift(hpfftim))));

figure,imagesc(hpim),colormap gray;

figure,imshow(hlp);

lpfftim = fftim .\* hlp;

lpim = uint8(real(ifft2(ifftshift(lpfftim))));

figure,imagesc(lpim),colormap gray;

