**Code c**

clc;

close all;

clear all;

a=imread('cameraman.tif');

w=[-1 -1 -1;-1 8 -1; -1 -1 -1]/9;

[m n]=size (a);

e=zeros(m,n);

for i=2:m-1

for j=2:n-1

e(i,j)=sum(sum(w.\*double(a(i-1:i+1,j-1:j+1))));

end

end

subplot(1,2,1);

imshow(a);

title('Original Image');

subplot(1,2,2);

imshow(uint8(e));

title('High pass with 3x3 mask');