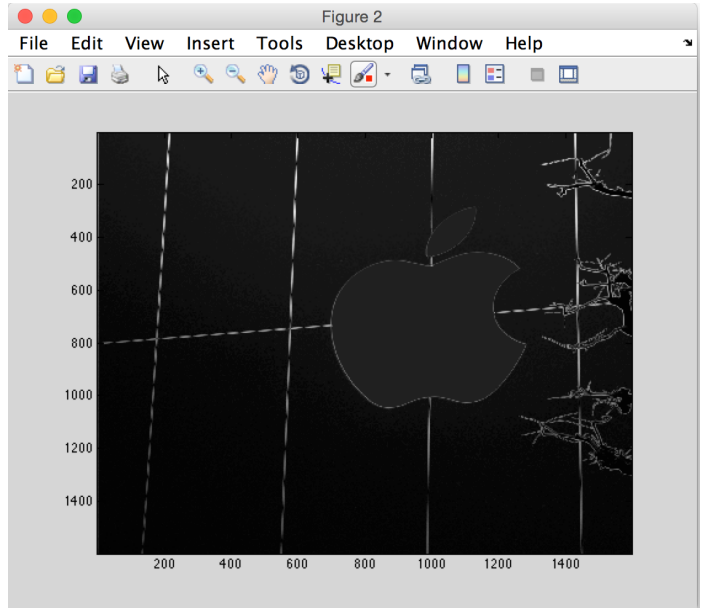
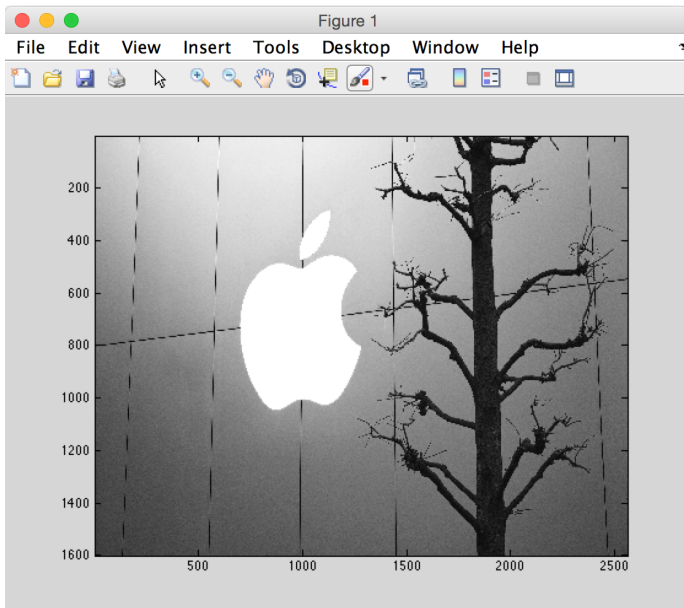


การบ้าน 8.2 12-directional Edge detection



[Code]

```
clear
f=imread('/Users/passaporng/Desktop/apple.jpg')
axis off
f1=im2double(f(:,:,1));
figure(1),imagesc(f1),colormap(gray);
h=zeros(5,5);
h(:,1)=100;
h(:,2)=100;
h(:,4)=-100;
h(:,5)=-100;
h=(1/1000)*h;
angle=[0:30:330];

for ii=1:12
    hr=imrotate(h,angle(ii),'nearest','crop');
    Gx=conv2(f1,hr,'same');
    c00=sprintf('g%d=Gx;',ii);
    eval(c00);
end

for i = 1:size(f1,1)-2
    for j=1:size(f1,1)-2
        G(i,j)=max([g1(i,j) g2(i,j) g3(i,j) g4(i,j) g5(i,j) g6(i,j) g7(i,j)
g8(i,j) g9(i,j) g10(i,j) g11(i,j) g12(i,j)]);
    end
end
figure(2),imagesc(G),colormap(gray)
```