
```
img = imread('building.tif');  
figure;  
imshow(img);  
  
gx = [1 2 1; 0 0 0; -1 -2 -1];  
gy = [-1 0 1; -2 0 2; -1 0 1];  
  
xImg = imfilter(img, gx);  
yImg = imfilter(img, gy);  
  
magnitude = xImg + yImg;  
  
figure;  
imshow(xImg);  
  
figure;  
imshow(yImg);  
  
figure;  
imshow(magnitude);
```

```
Warning: Image is too big to fit on screen; displaying at 67%  
Warning: Image is too big to fit on screen; displaying at 67%  
Warning: Image is too big to fit on screen; displaying at 67%  
Warning: Image is too big to fit on screen; displaying at 67%
```







Published with MATLAB® R2015a