clc;

clear;

I = imread('moon.tif');

Igray = im2gray(I);

imshow(I)

subplot(2,2,1), imshow(I), title('Original Image');

BW1 = edge(Igray, 'Sobel');

BW2 = edge(Igray, 'Prewitt');

BW3 = edge(Igray, 'Roberts');

subplot(2,2,2), imshow(BW1), title('Sobel Edge Detection');

subplot(2,2,3), imshow(BW2), title('Prewitt Edge Detection');

subplot(2,2,4), imshow(BW3), title('Roberts Edge Detection');

