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```
% Operators with functions
%Created by Jyotiraditya Bhos

clear all;
close all;
clc;

% Read the image from the provided URL
I = imread('https://upload.wikimedia.org/wikipedia/en/thumb/7/7d/Lenna_%28test_image%29.png/330px-Lenna_%28test_image%29.png');

% Convert the image to grayscale
I_gray = rgb2gray(I);

% Apply different edge detection methods on the grayscale image
BW1 = edge(I_gray, 'sobel');      % Sobel edge detection
BW2 = edge(I_gray, 'canny');      % Canny edge detection
BW3 = edge(I_gray, 'prewitt');    % Prewitt edge detection
BW4 = edge(I_gray, 'roberts');    % Roberts edge detection
BW5 = edge(I_gray, 'log');        % Laplacian of Gaussian (LoG) edge detection
BW6 = edge(I_gray, 'zerocross'); % Zero-Crossing edge detection

% Display the original image and the results of edge detection in a subplot
subplot(2,4,1); imshow(I);
title('Original Image');

subplot(2,4,2); imshow(BW1);
title('Sobel');

subplot(2,4,3); imshow(BW2);
title('Canny');

subplot(2,4,4); imshow(BW3);
title('Prewitt');

subplot(2,4,5); imshow(BW4);
title('Roberts');

subplot(2,4,6); imshow(BW5);
title('LoG');

subplot(2,4,7); imshow(BW6);
title('Zero-Crossing');
```

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**Original Image**



**Sobel**



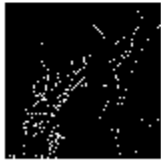
**Canny**



**Prewitt**



**Roberts**



**LoG**



**Zero-Crossing**



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