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%Applying Edge Detection Techniques on Images
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```
%Read an image
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```
RBG = imread('random.jpg', 'jpg')
```

```
RBG = 1280x1280x3 uint8 array
```

```
RBG(:, :, 1) =
```

```
255 255 254 253 253 253 254 254 255 254 253 252 252 254 255 255 255 2
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%Convert it to grayscale
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```
I = rgb2gray(RBG)
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```
I = 1280x1280 uint8 matrix
```

```
235 235 234 233 233 233 234 234 235 234 233 232 232 ...
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%Edge Detection
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%Sobel mask
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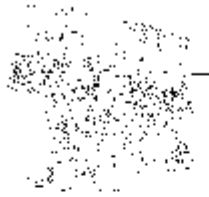
```
subplot(2,2,1), imshow(~edge(I, 'sobel'))
```

```
title('Sobel')
```

```
subplot(2,2,2), imshow(I)
```

```
title('Original')
```

**Sobel**



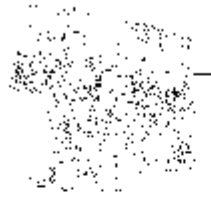
**Original**



```
figure
%_____

%Prewitt
subplot(2,2,1), imshow(~edge(I, 'prewitt'))
title('Prewitt')
subplot(2,2,2), imshow(I)
title('Original')
```

**Prewitt**



**Original**



```
figure
%_____

%Roberts
subplot(2,2,1), imshow(~edge(I, 'roberts'))
title('Robert')
subplot(2,2,2), imshow(I)
title('Original')
```

**Robert**



**Original**



figure  
%

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