

```
%% Name: Bola Fahmi Ramzi | Section: 1
```

```
clear;  
clc;  
x = imread('test.jpg');  
x = imresize(x,0.1);  
xbw = rgb2gray(x);
```

```
%% 1st Derivative
```

```
x_edge_1 = edge(xbw, 'sobel');  
figure;  
imshow(x_edge_1);
```

```
%% 2nd Derivative
```

```
x_edge_2 = edge(xbw, 'log');  
figure;  
imshow(x_edge_2);
```

```
%% Canny Method
```

```
x_edge_3 = edge(xbw, 'canny');  
figure;  
imshow(x_edge_3);
```

```
%% Conclusion
```

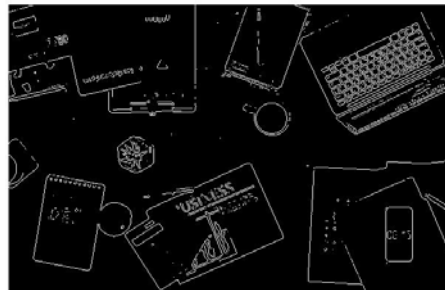
```
% By comparing all the images side by side, it appears that Canny's  
method
```

```
% is more sensitive to edges in compare to 1st and 2nd Derivative  
methods.
```

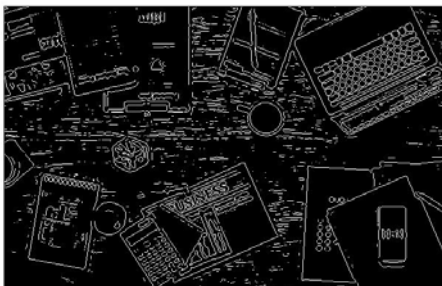
```
%% Original Image:
```



```
%% First Derivative:
```



```
%% Second Derivative
```



```
%% Canny Method
```

