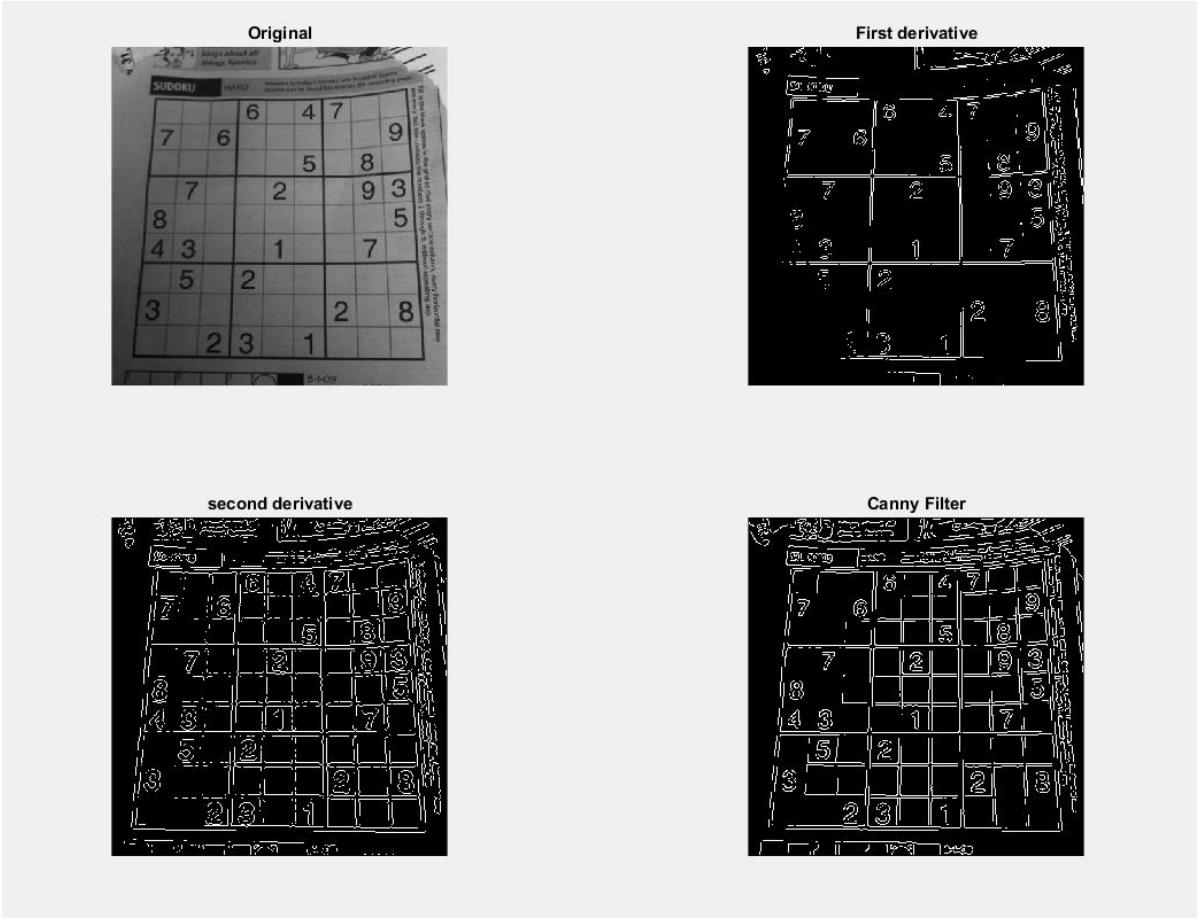
Ahmed El-Sayed Ahmed Nassar **Sec: 1**

Code:

```
I = imread('sudoku-original.jpg');
subplot(2,2,1);%show original image
title('Original');
firstDev = edge(I, 'prewitt');
subplot(2,2,2);
imshow(firstDev);
title('First derivative');
secondDev = edge(I, 'log');
subplot(2,2,3);
imshow(secondDev);
title('second derivative');
cannyAlg = edge(I, 'canny');
subplot(2,2,4);
imshow(cannyAlg);
title('Canny Filter');
```

Figure:



- First Derivative not accurate as a lot of edges didn’t detected.

- Second Derivative more accurate than first derivative but it has a lot of noise edges

- Canny Filter is best one of them, as it detected almost all edges and removed noises that appears in second derivative filter.