EDGE DETECTION
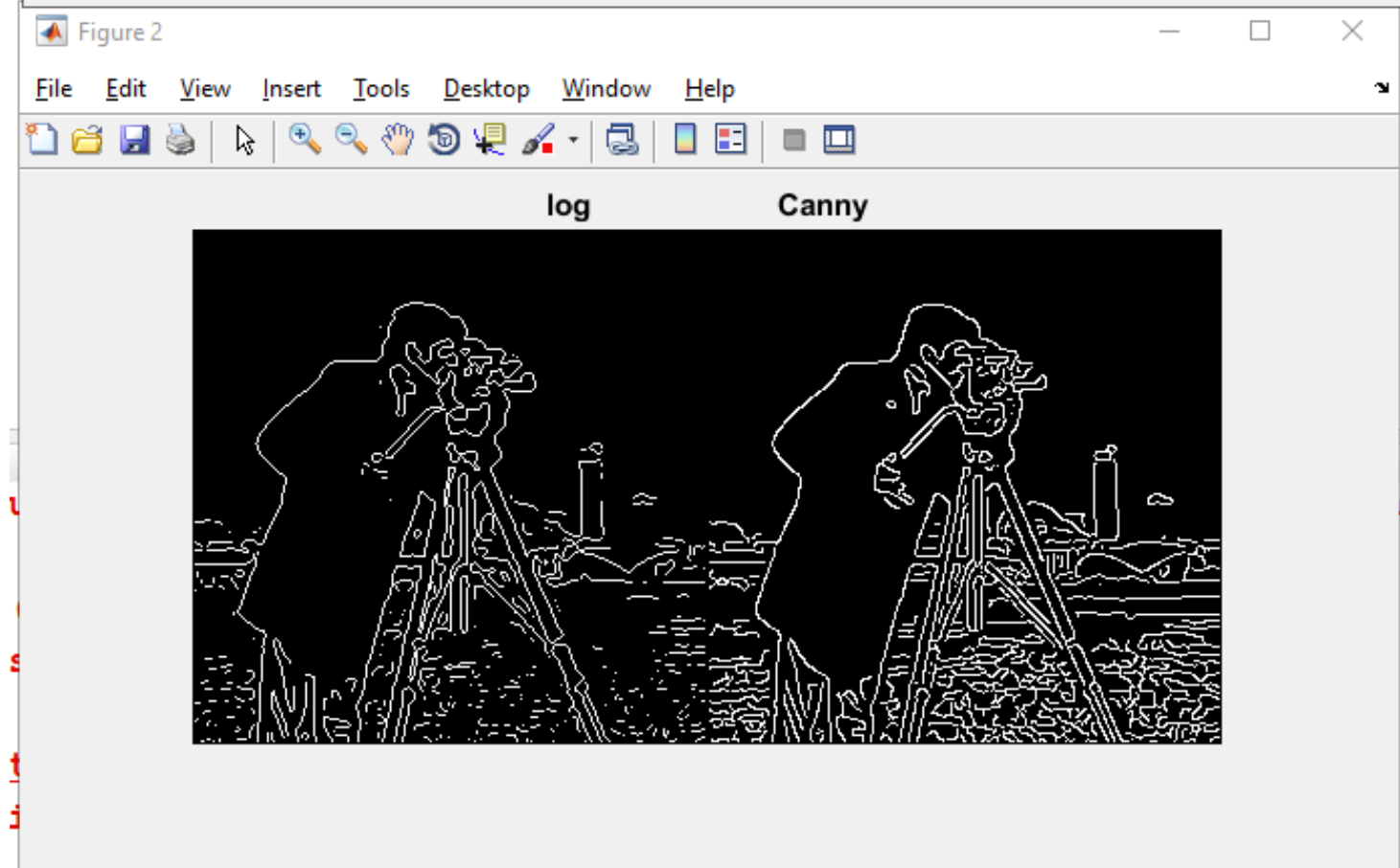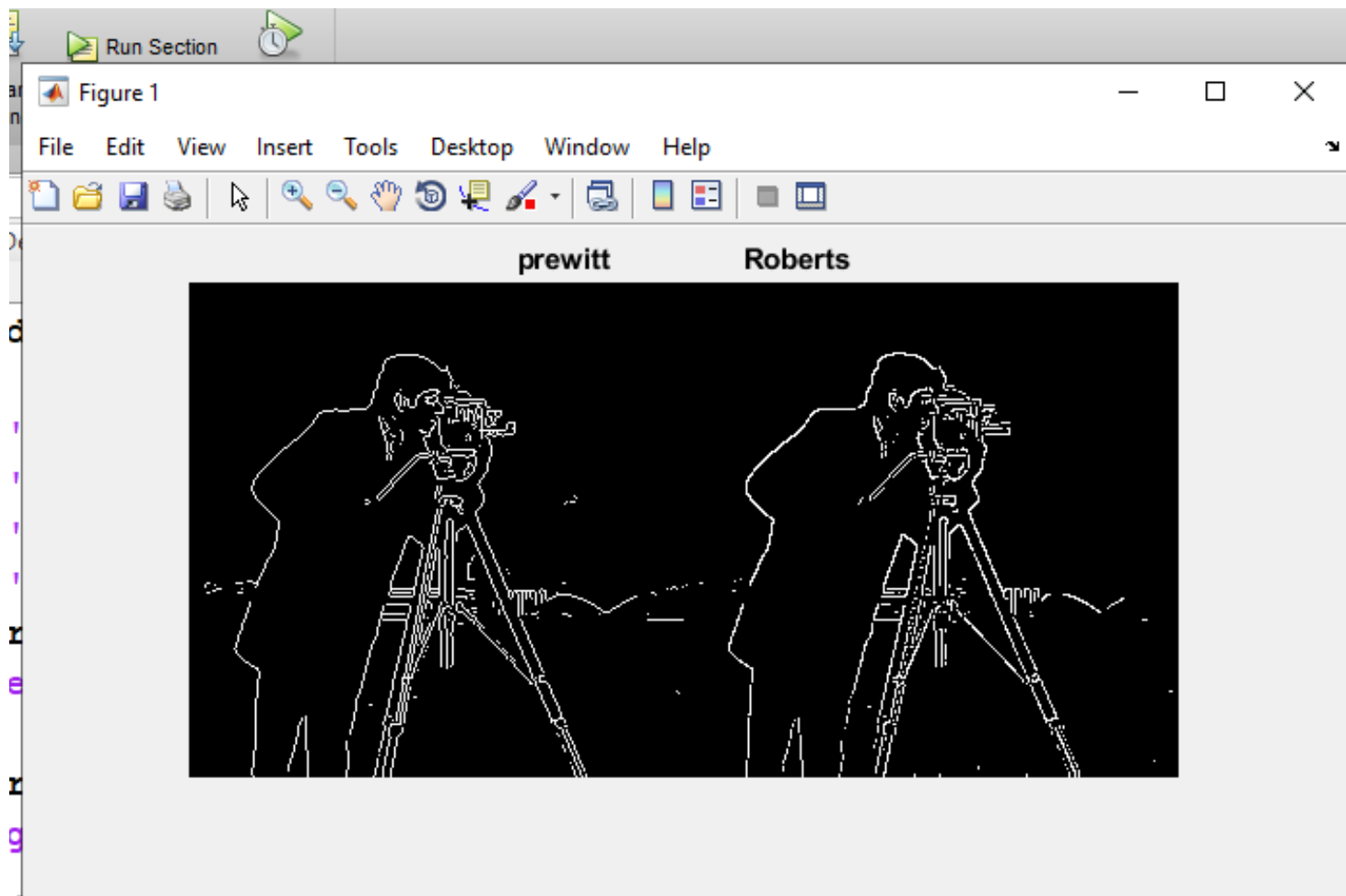

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سكشن / 3

```matlab
M = imread('cameraman.tif');
imshow(M)
Y=edge(M,'prewitt');
X=edge(M,'Roberts');
Z=edge(M,'log');
U=edge(M,'Canny');
imshowpair(Y,X,'montage');
title('prewitt              Roberts')
figure
imshowpair(Z,U,'montage')
title('log                  Canny')
```

Figure 1

File   Edit   View   Insert   Tools   Desktop   Window   Help

prewitt   Roberts

Figure 2

File   Edit   View   Insert   Tools   Desktop   Window   Help

log   Canny

the first derivative is acceptable when we don't need the useless edges or we need the important or primary edges like the man who talking the photo..
the canny give us highly edge results and it's useful when we want to get all the edges of the photo without any noise or missed edges like in log 'second derivative'.
in my opinion everyone of them have an advantage and disadvantage depends on our needs.