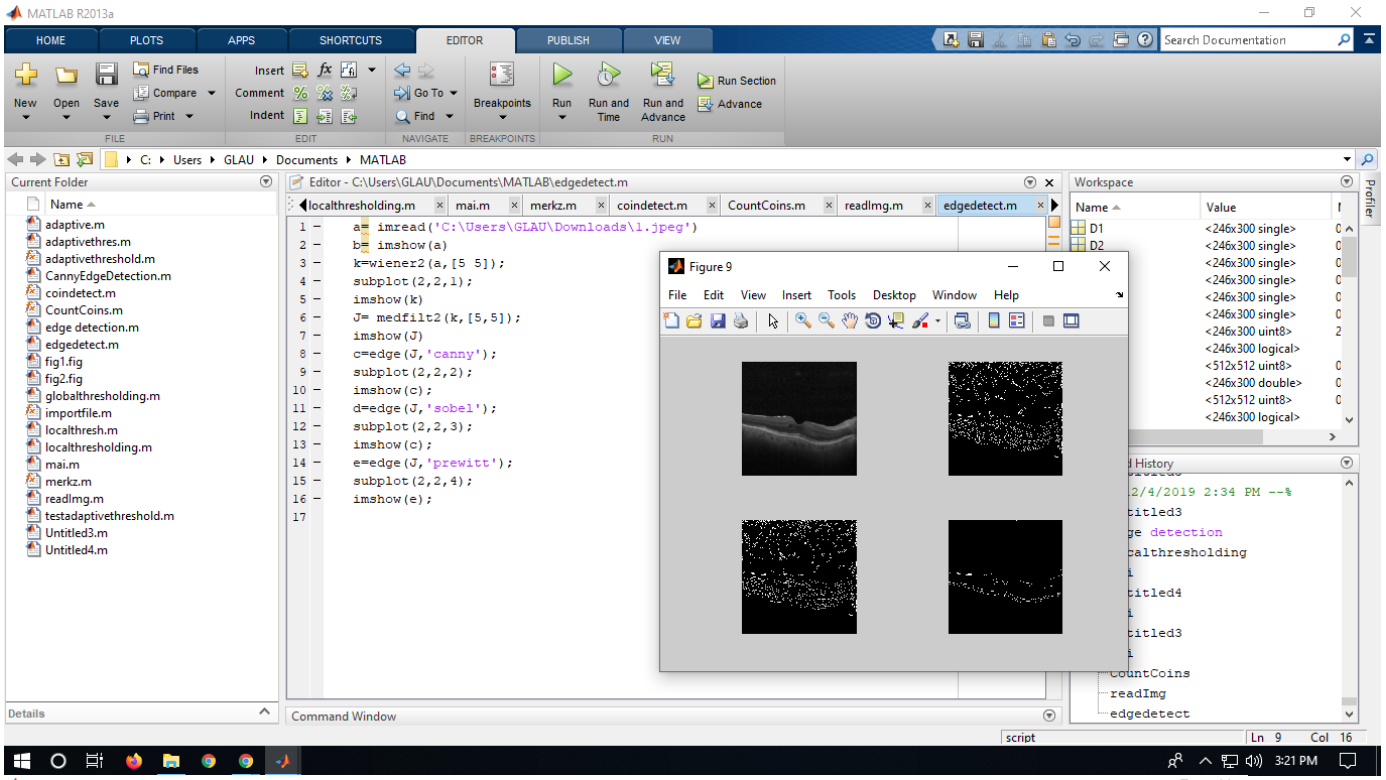
CountCoins

```
function ret = CountCoins(img)
 subplot(2,2,1);
 imshow(img);
 subplot(2,2,2);
 imgBW = im2bw(img);
 imshow(imgBW);
 subplot(2,2,3);
 imhist(img);
 subplot(2,2,4);
 imgZ = zeros(size(img));
 imgZ(img > 100) = 1;
 imshow(imgZ);
 ret = round(sum(imgBW(:)) / 2100);
 imgConn = bwconncomp(imgZ);
 ret = imgConn.NumObjects;
end
```

ReadImg

```
img=imread('coins.png')
n=CountCoins(img)
```


MATLAB R2013a
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Breakpoints
Run
Run and Time
Run and Advance
Run Section
Advance
FILE
EDIT
NAVIGATE
BREAKPOINTS
RUN
C: ▸ Users ▸ GLAU ▸ Documents ▸ MATLAB
Current Folder
Name
adaptive.m
adaptivethres.m
adaptivethreshold.m
CannyEdgeDetection.m
coindetect.m
CountCoins.m
edge detection.m
edgedetect.m
fig1.fig
fig2.fig
globalthresholding.m
importfile.m
localthresh.m
localthresholding.m
mai.m
merkz.m
readImg.m
testadaptivethreshold.m
Untitled3.m
Untitled4.m
Details
Editor - C:\Users\GLAU\Documents\MATLAB\edgedetect.m
localthresholding.m
mai.m
merkz.m
coindetect.m
CountCoins.m
readImg.m
edgedetect.m
1 a= imread('C:\Users\GLAU\Downloads\1.jpeg')
2 b= imshow(a)
3 k=wiener2(a,[5 5]);
4 subplot(2,2,1);
5 imshow(k)
6 J= medfilt2(k,[5,5]);
7 imshow(J)
8 c=edge(J,'canny');
9 subplot(2,2,2);
10 imshow(c);
11 d=edge(J,'sobel');
12 subplot(2,2,3);
13 imshow(c);
14 e=edge(J,'prewitt');
15 subplot(2,2,4);
16 imshow(e);
17
Figure 9
File Edit View Insert Tools Desktop Window Help
Workspace
Name
Value
D1
D2
<246x300 single>
<246x300 uint8>
<246x300 logical>
<512x512 uint8>
<246x300 double>
History
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ge detection
calthresholding
citled4
citled3
countCoins
readImg
edgedetect
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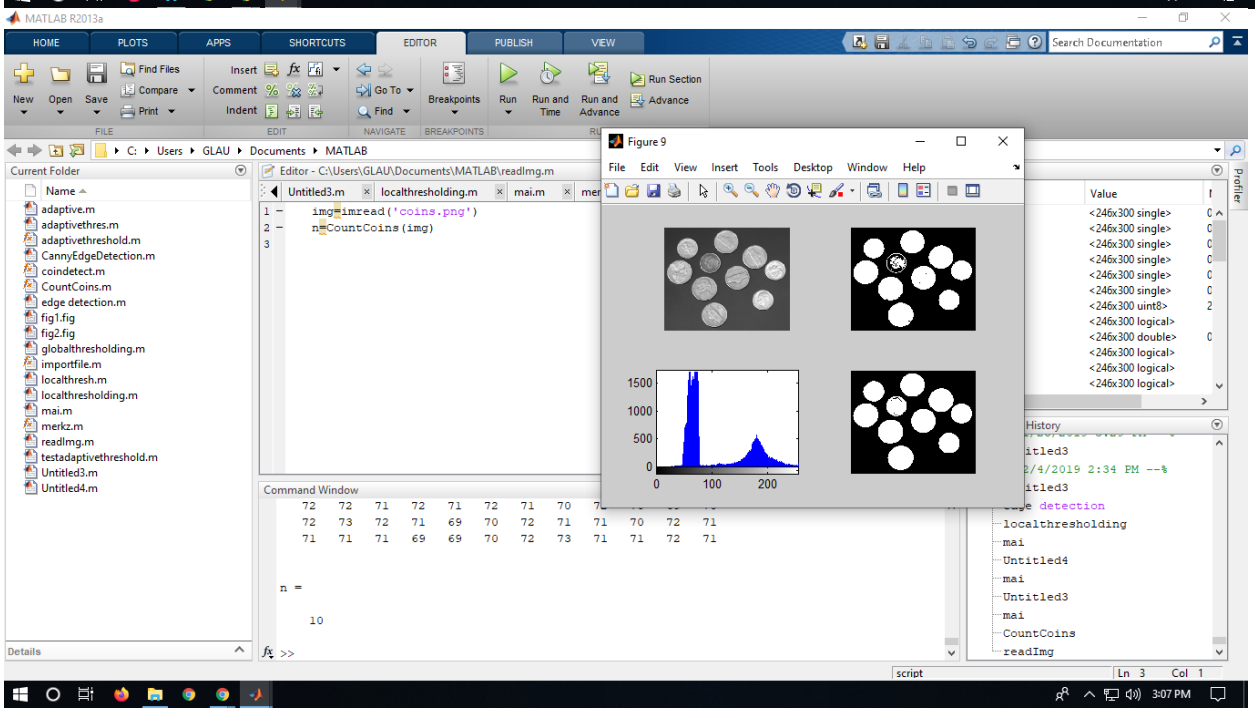
MATLAB R2013a
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Run and Advance
Run Section
Advance
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localthresholding.m
mai.m
merkz.m
readImg.m
testadaptivethreshold.m
Untitled3.m
Untitled4.m
Details
Editor - C:\Users\GLAU\Documents\MATLAB\readImg.m
Untitled3.m
localthresholding.m
mai.m
1 img=imread('coins.png')
2 n=CountCoins(img)
3
Figure 9
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Command Window
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72 73 72 71 69 70 72 71 71 70 72 71
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n =
10
>>
Workspace
Name
Value
<246x300 single>
<246x300 uint8>
<246x300 logical>
<246x300 double>
History
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ge detection
localthresholding
mai
Untitled4
mai
Untitled3
mai
CountCoins
readImg
script
Ln 3 Col 1
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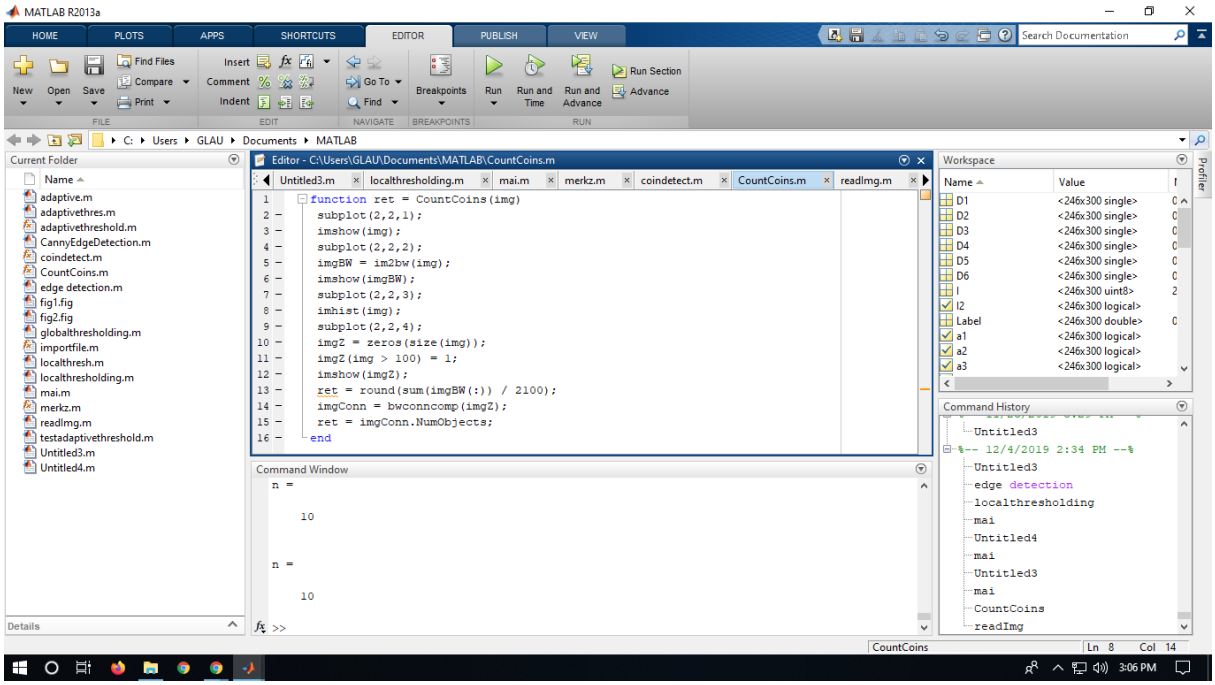
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mai.m
merkz.m
readImg.m
testadaptivethreshold.m
Untitled3.m
Untitled4.m
Details
Editor - C:\Users\GLAU\Documents\MATLAB\CountCoins.m
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localthresholding.m
mai.m
merkz.m
coindetect.m
CountCoins.m
readImg.m
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3 imshow(img);
4 subplot(2,2,2);
5 imgBW = im2bw(img);
6 imshow(imgBW);
7 subplot(2,2,3);
8 imhist(img);
9 subplot(2,2,4);
10 imgZ = zeros(size(img));
11 imgZ(img > 100) = 1;
12 imshow(imgZ);
13 ret = round(sum(imgBW(:)) / 2100);
14 imgConn = bwconncomp(imgZ);
15 ret = imgConn.NumObjects;
16 end
Command Window
n =
10
n =
10
>>
Workspace
Name
Value
D1 <246x300 single>
D2 <246x300 single>
D3 <246x300 single>
D4 <246x300 single>
D5 <246x300 single>
D6 <246x300 single>
I <246x300 uint8>
I2 <246x300 logical>
Label <246x300 double>
a1 <246x300 logical>
a2 <246x300 logical>
a3 <246x300 logical>
Command History
Untitled3
%-- 12/4/2019 2:34 PM --%
Untitled3
edge detection
localthresholding
mai
Untitled4
mai
Untitled3
mai
CountCoins
readImg
CountCoins
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Col 14
3:06 PM