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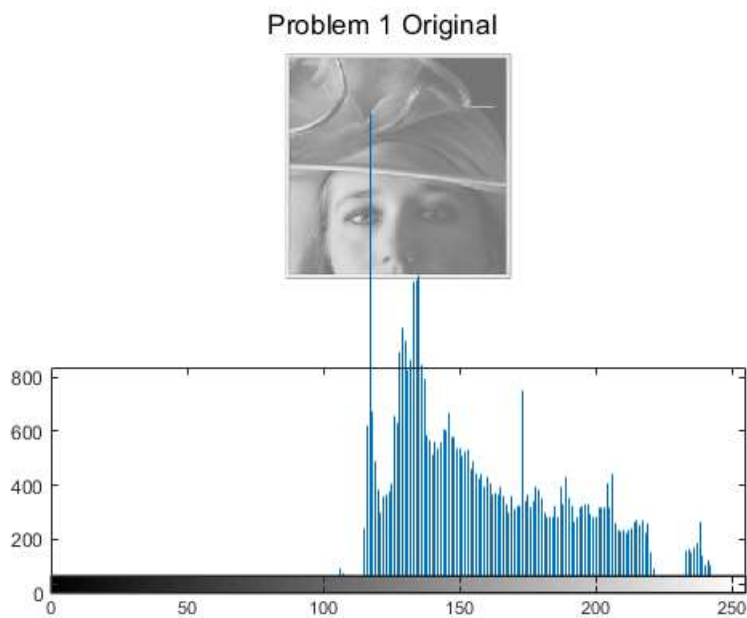
Problem 1

```
A = imread('lowcontrast.jpg');  
L = 255;
```

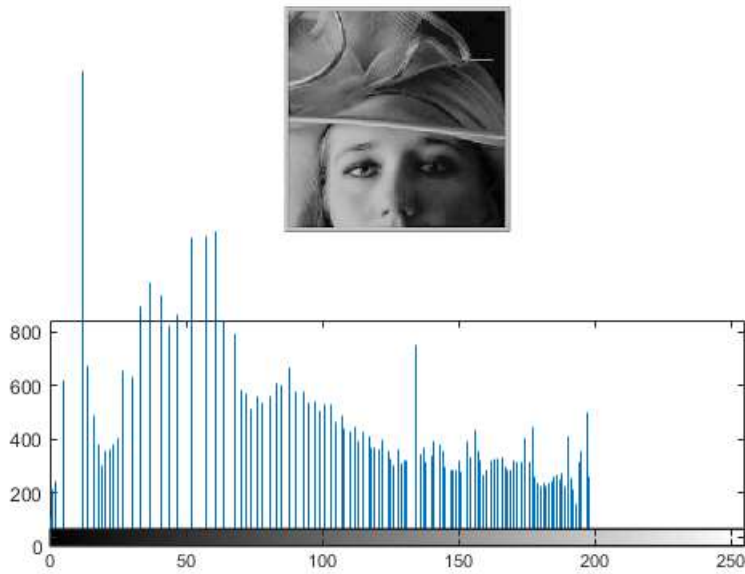
```
equ = my_histeq(A, L);
```

```
figure  
sgtitle('Problem 1 Original')  
subplot(2,1,1)  
imshow(A)  
subplot(2,1,2)  
imhist(A)
```

```
figure  
sgtitle('Problem 1 Modified')  
subplot(2,1,1)  
imshow(equ)  
subplot(2,1,2)  
imhist(equ)
```



Problem 1 Modified

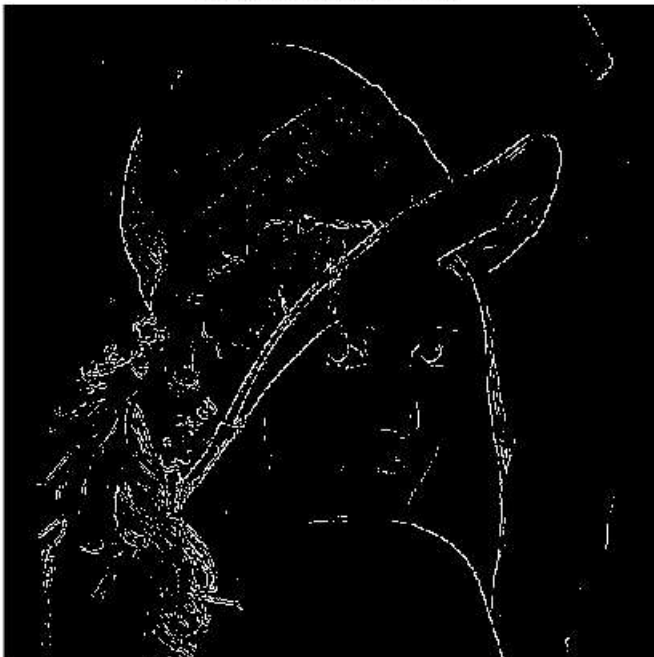


Problem 2

```
A = imread('lena.bmp');  
B = rgb2gray(A);  
figure  
imshow(B);  
  
roberts = edge(B, 'Roberts');  
figure  
imshow(roberts), title('Roberts Edge Detection');  
  
prewitt = edge(B, 'Prewitt');  
figure  
imshow(prewitt), title('Prewitt Edge Detection')  
  
sobel = edge(B, 'Sobel');  
figure  
imshow(sobel), title('Sobel Edge Detection')  
  
% the roberts edge is the worst of the three. I can't tell the difference  
% between the other two.
```



Roberts Edge Detection



Prewitt Edge Detection



Sobel Edge Detection



Problem 3

```
A = im2double(imread('blur_image.jpg'));  
mask = [-1 -1 -1; -1 8 -1; -1 -1 -1];
```

```

ConvImg = imfilter(A, mask);

minConv = min(ConvImg(:));
maxConv = max(ConvImg(:));
ConvImg = (ConvImg - minConv) / (maxConv - minConv);

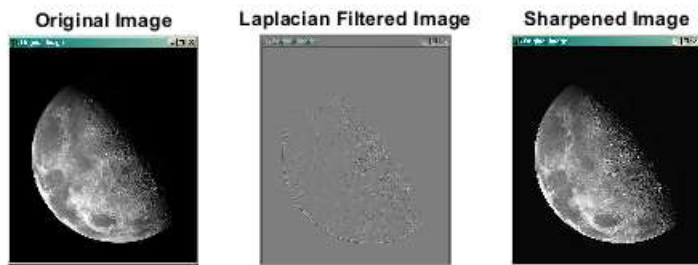
SharpImg = A + ConvImg;

minSharp = min(SharpImg(:));
maxSharp = max(SharpImg(:));
SharpImg = (SharpImg - minSharp) / (maxSharp - minSharp);

SharpImg = imadjust(SharpImg, [60/255 200/255], [0,1]);

figure;
subplot(1,3,1), imshow(A), title('Original Image')
subplot(1,3,2), imshow(ConvImg), title('Laplacian Filtered Image')
subplot(1,3,3), imshow(SharpImg), title('Sharpened Image')

```



```
function final = my_histeq(A, L)
    FreqPix = imhist(A);
    Cumhist = cumsum(FreqPix);
    CDFPix = Cumhist/L;
    Valrep = CDFPix(double(A)+1);
    final = uint8(Valrep);
end
```

Not enough input arguments.

Error in my_histeq (line 2)
 FreqPix = imhist(A);

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