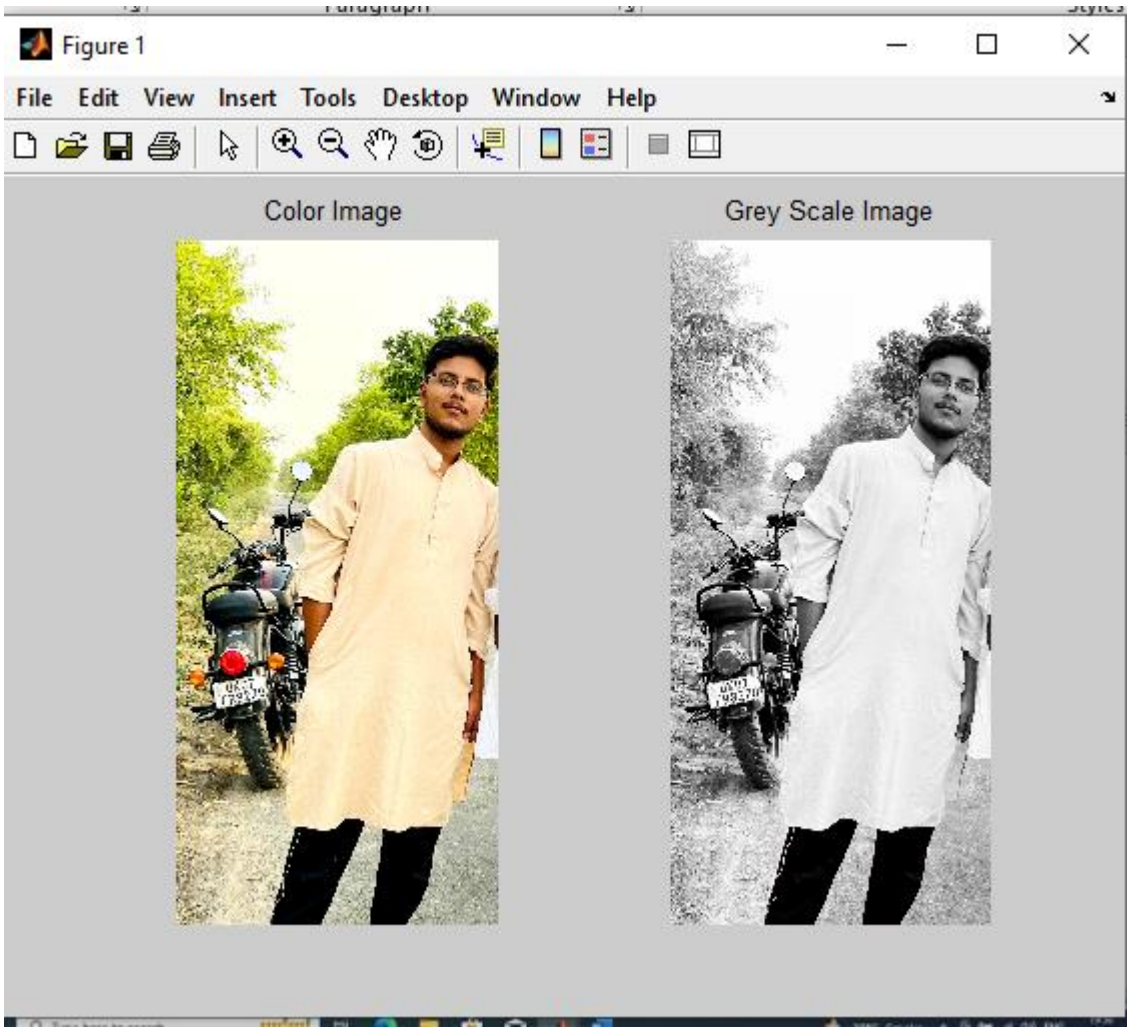
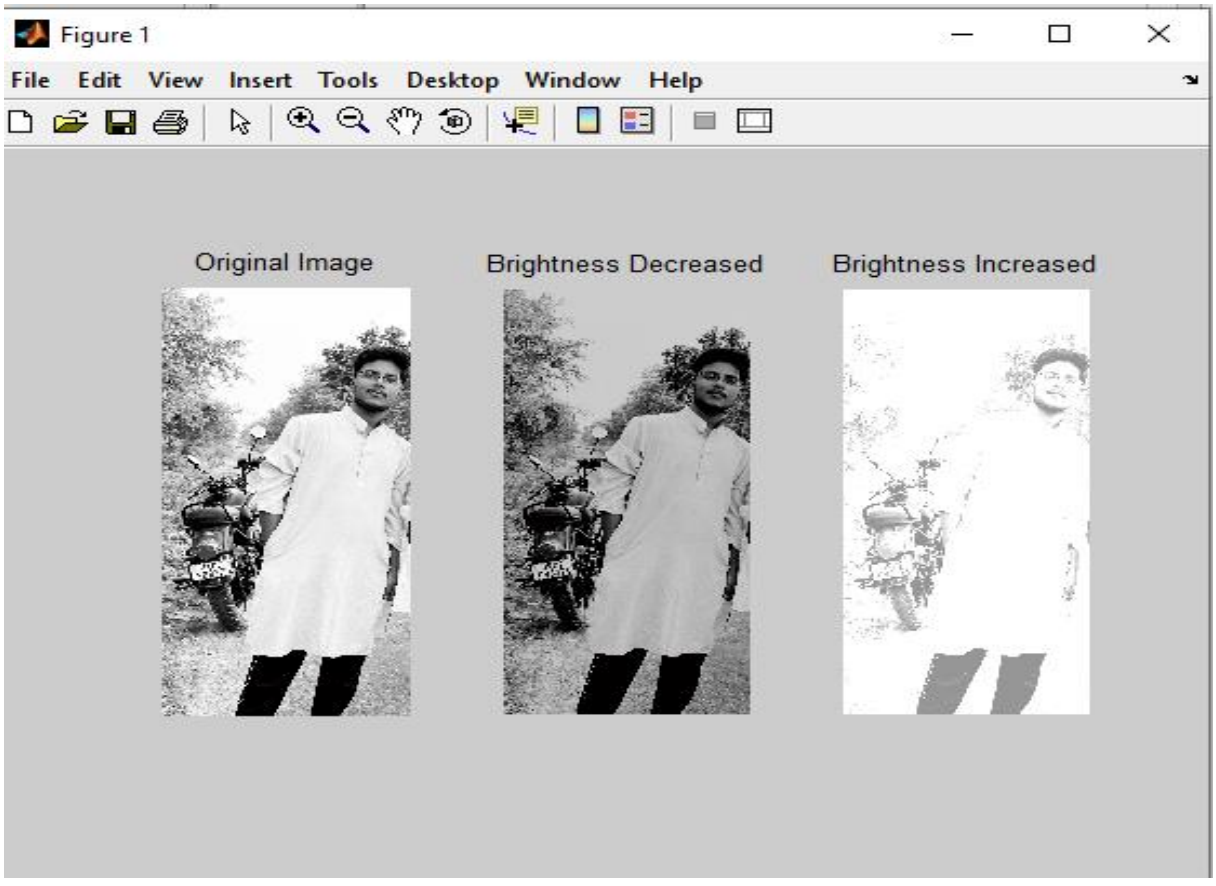
```
clc;
clear all;
close all;

% - Reading the image
a= imread('D:\RS\P1\1671458913727.jpg')

% - Converting color image to gray scale image
b=rgb2gray(a)


% Creating the output window
figure();


% Dividing the output window into multiple section
subplot(1,2,1);

%Display the image
imshow(a)

%Giving the title to the image
title('Color Image');


subplot(1,2,2);
imshow(b);
title('Grey Scale Image');
```



```
clc;
clear all;
close all;

img=imread('D:\RS\P1\1671458913727.jpg');
img1=rgb2gray(img)
subplot(1,3,1);
imshow(img1);
title('Original Image');


B=double(img1)-50;
subplot(1,3,2)
imshow(uint8(B))
title('Brightness Decreased')

B=double(img1)+150;
subplot(1,3,3)
imshow(uint8(B))
title('Brightness Increased')
```



```
close all;
clear all;
clc;

img1=imread('D:\RS\P1\1671458913727.jpg')
img = rgb2gray(img1)
subplot(1,2,1)
imshow(img)
title('Original image')
[ row col ]=size(img)
for x=1:row
      for y=1:col
            img_neg(x,y)=255-img(x,y);
      end
end
img_ne=uint8(img_neg);
subplot(1,2,2);
imshow(img_ne);
title('Negative Image')
```

Editor - D:\RS\P3\PRAC3A.m

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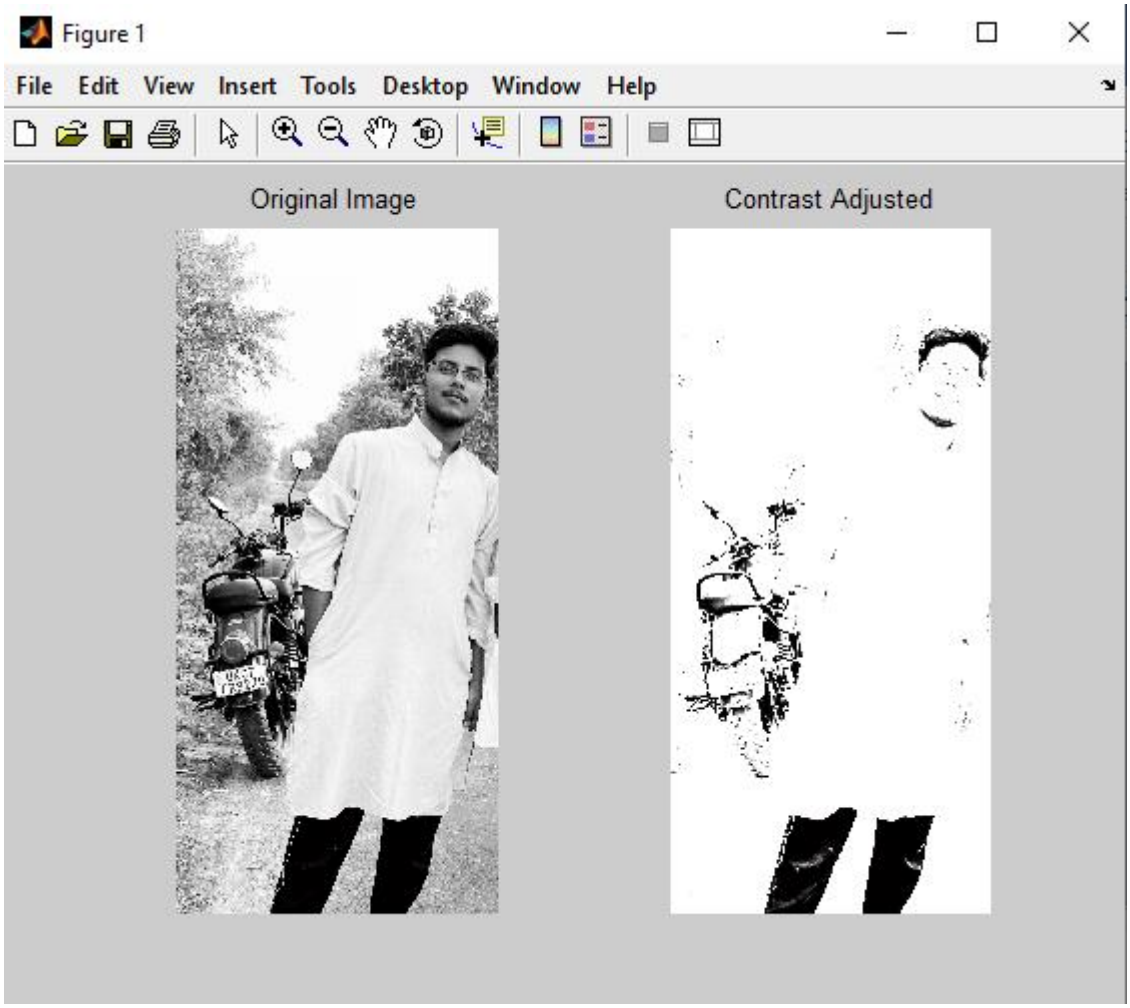
```
1  close all;
2  clear all;
3  clc;
4  img2=imread('D:\RS\P1\1671458913727.jpg')
5  img1 = rgb2gray(img2);
6  subplot(1,2,1);
7  imshow(img1);
8  imshow(img1);
9  title('Original Image');
10 B=double(img1)*(10);
11 subplot(1,2,2)
12 imshow(uint8(B))
13 title('Contrast Adjusted')
```

script Ln 1 Col 7 OVR



Editor - D:\RS\P3\PRAC3B.m

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Stack: Base

```
clc;
clear all;
close all;
p = imread('D:\RS\P1\1671458913727.jpg');
p1=rgb2gray(p);
subplot(1,2,1)
imshow(p1);
title('original Image')
T=input('Enter the value fot THRESHOLD:');
[row col ]= size(p1);

for x=1:row
      for y=1:col
            if((p1 (x,y)<=T))
                  p1 (x,y)=0;
            else
                  p1 (x,y)=255;
            end;
       end;
end;
subplot(1,2,2)
imshow(p1);
title('Threshold image')
```

Command Window

New to MATLAB? Watch this Video, see Demos, or read Getting Started.

```
Enter the value fot THRESHOLD:150
>>
```

Figure 1

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Editor - D:\RS\P3\PRAC3C.m

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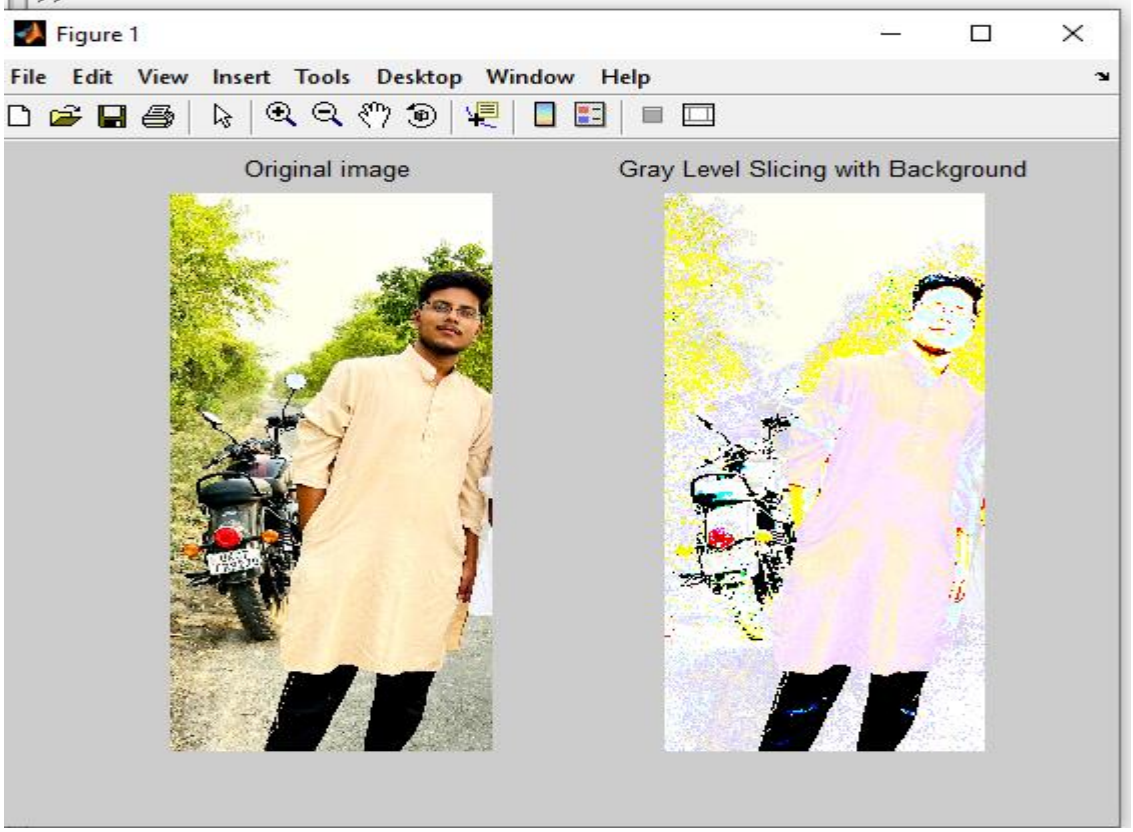
```
% Prac 3C:- gray scale slicing with background
clc;
clear all;
close all;
img = imread('D:\RS\P1\1671458913727.jpg');
subplot(1,2,1);
imshow(img);
title('Original image');
j= double(img);
[ row col ]=size(j);
T1=input('Enter the value for Lowest HRESHOLD');
T2=input('Enter the value for Highest HRESHOLD');
for x=1:1:row
      for y=1:1:col
            if(j(x,y)>T1 && (j(x,y)<T2))
                j(x,y)=255;
            else
                  j(x,y)=img(x,y);
            end
      end
end
subplot(1,2,2);
imshow(uint8(j));
title('Gray Level Slicing with Background')
```

Command Window

New to MATLAB? Watch this Video, see Demos, or read Getting Started.

```
Enter the value for Lowest HRESHOLD15
Enter the value for Highest HRESHOLD200
>>
```



Editor - D:\RS\P3\PRAC3D.m

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Stack: Base

1.0 1.1

```
% Prac 3D:- gray scale slicing without background
clc;
clear all;
close all;
img = imread('D:\RS\P1\1671458913727.jpg');
subplot(1,2,1);
imshow(img);
title('Original image');
j= double(img);
[ row col ]=size(j);
T1=input('Enter the value for Lowest HRESHOLD');
T2=input('Enter the value for Highest HRESHOLD');
for x=1:1:row
      for y=1:1:col
            if(j(x,y)>T1 && (j(x,y)<T2))
                  j(x,y)=255;
            else
                  j(x,y)=0;
            end
      end
end
subplot(1,2,2);
imshow(uint8(j));
title('Gray Level Slicing without Background')
```

Command Window

New to MATLAB? Watch this Video, see Demos, or read Getting Started.

```
Enter the value for Lowest HRESHOLD20
Enter the value for Highest HRESHOLD150
>>
```

Figure 1

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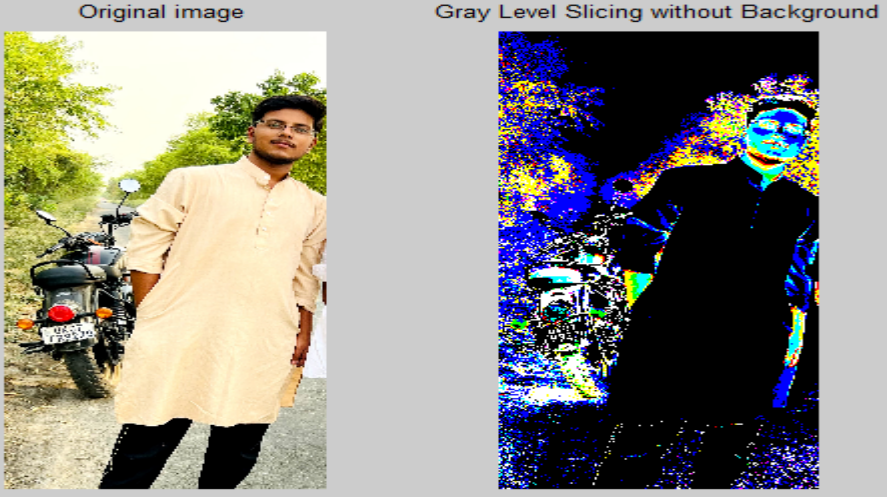

Editor - D:\RS\P4\PRAC4.m*

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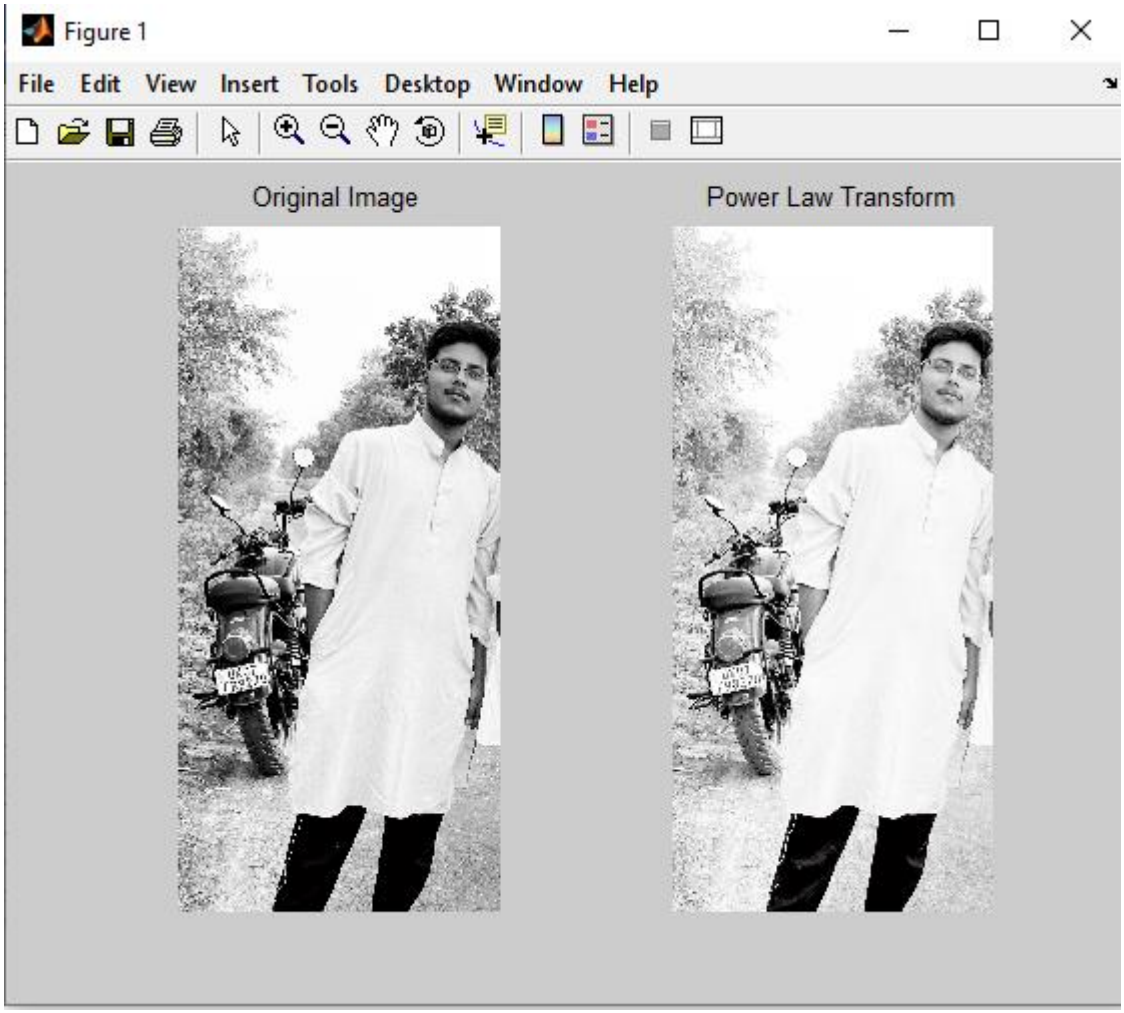
Stack: Base

```
%Practical 4A-Power Law Transformation
clc;
clear all;
close all;
img1 = imread('D:\RS\P1\1671458913727.jpg');
img = rgb2gray(img1)
subplot(1,2,1)
imshow(img);
title('Original Image');
[ row col ]=size(img);
c=1;
img=double(img);
gamma=0.5;
for x=1:row
     for y=1:col
          j(x,y)=c*(img(x,y)^gamma);
     end;
end;
subplot(1,2,2);
imshow(j,[])
title('Power Law Transform');
```



Editor - D:\RS\P4\PRAC4B.m

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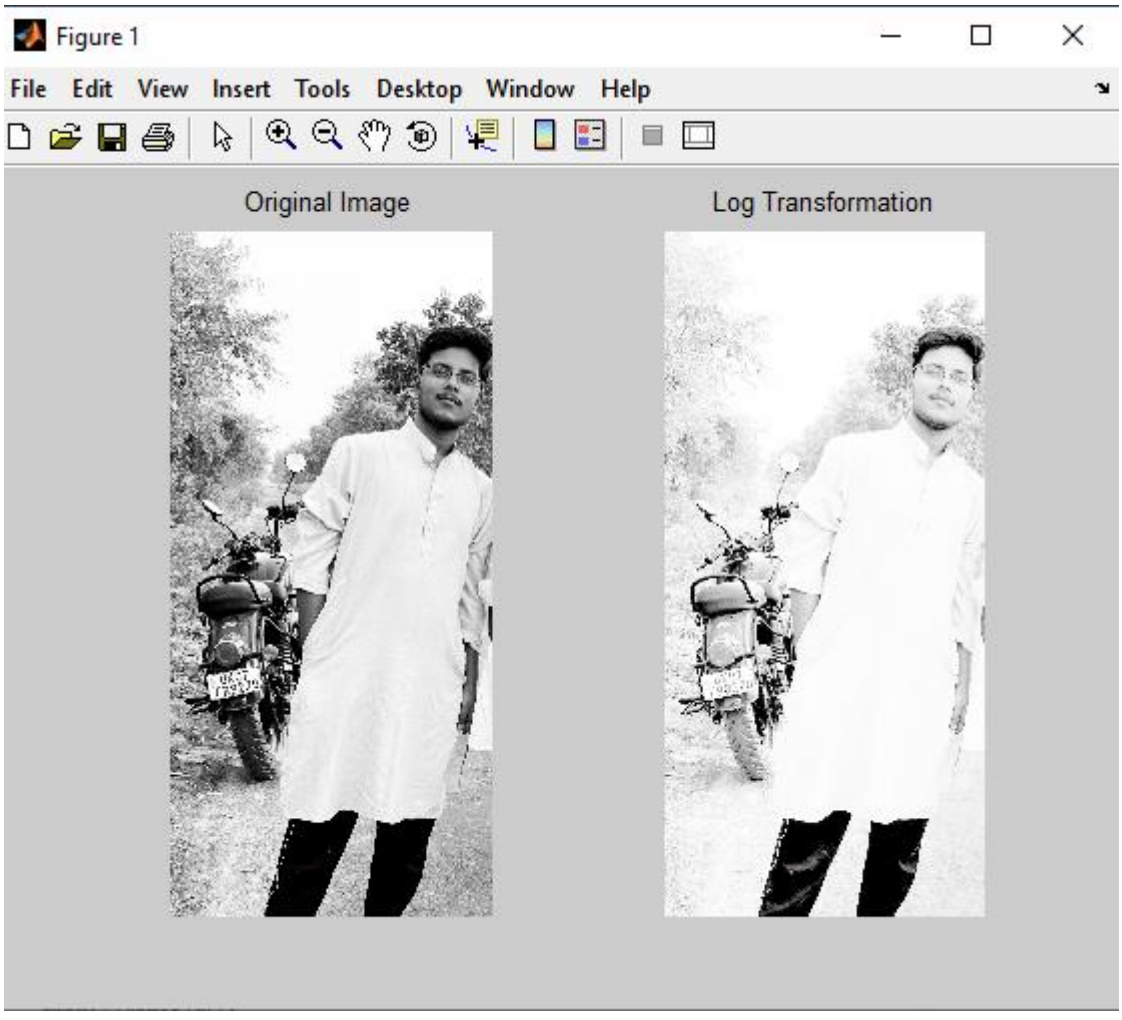
Stack: Base

```
%Practical 4B- Log Transformation
clc;
clear all;
close all;
img1 = imread('D:\RS\P1\1671458913727.jpg');
img = rgb2gray(img1);
subplot(1,2,1)
imshow(img);
title('Original Image');
L=255;
c=L/log10(1+L);
d= c*(log10 (1+double(img)));
subplot(1,2,2)
imshow(uint8(d));
title('Log Transformation');
```



Editor - D:\RS\P5\PRAC5.m

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```
%Practical 5-Histogram
clc;
clear all;
close all;
a = imread('D:\RS\P1\1671458913727.jpg');
a1 = double(a);
a2 = rgb2gray(uint8((a1)));
[ row col ]= size(a2);
h = zeros(1,256);
for m=1:1:row
     for n=1:1:col
          t = a2(m,n);
          h(t+1)= h(t+1)+1;
      end;
end
subplot(1,2,1);
imshow(uint8(a2))
title('Original Image');
subplot(1,2,2);
bar(h)
title('Histogram of Original Image');
```

script Ln 5 Col 13 OVR