

Practical 7

Aim: Threhsold Operation & Gray Level Slicing

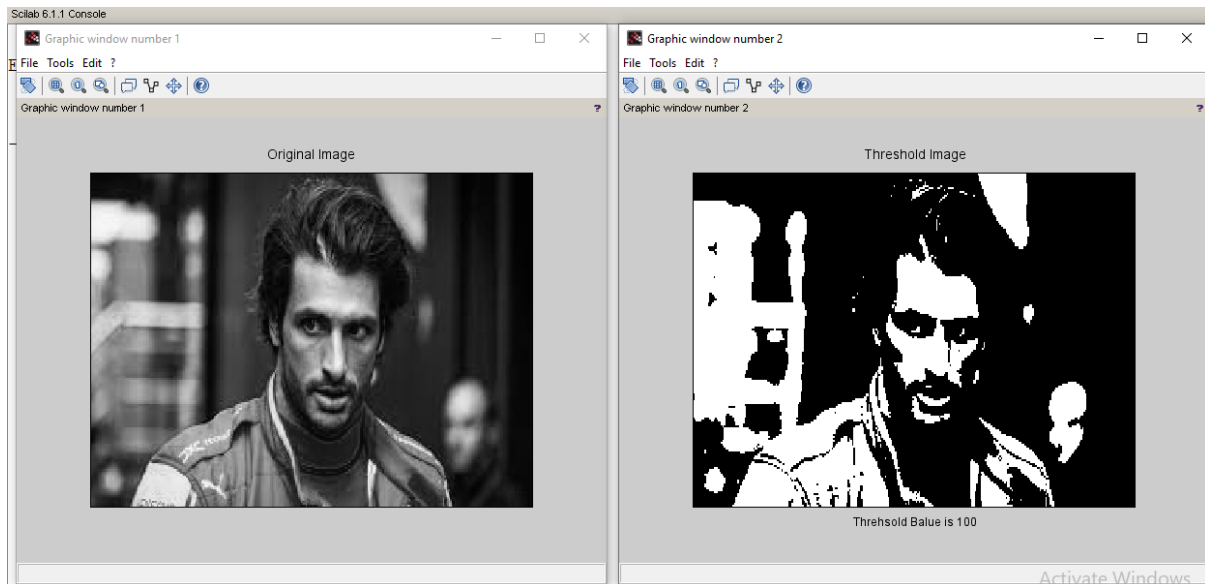
Threshold Operation

Code:

```
clc;
close;
a = imread("C:\Users\admin\Pictures\download.jpg");
a = rgb2gray(a);
[m n] = size(a);
t = input("Enter threshold parameter: ");
for i = 1:m
    for j = 1:n
        if(a(i,j)<t)
            b(i,j)=0;
        else
            b(i,j) = 255;
        end
    end
end
figure(1);
imshow(a);
title("Original Image");
figure(2);
imshow(b);
title("Threshold Image");
xlabel(sprintf("Threhsold Balue is %g",t))
```

Output:

```
Enter threshold parameter: 50
```



Gray Level Slicing

Code:

```
clc;

x = imread("C:\Users\admin\Pictures\download.jpg");
x = rgb2gray(x);
y = double(x);
[m,n] = size(y);
L = max(max(x));
a = round(L/2);
b = L;
for i = 1:m
    for j = 1:n
        if (y(i,j))>=a & y(i,j)<=b
            z(i,j) = L;
        else
            z(i,j) = 0;
        end
    end
end
```

```
z = uint8(z);  
figure(1);  
imshow(x);  
title("Original Image");  
figure(2);  
imshow(z);  
title("Gray Level Slicing without preserving Background")
```

Output: