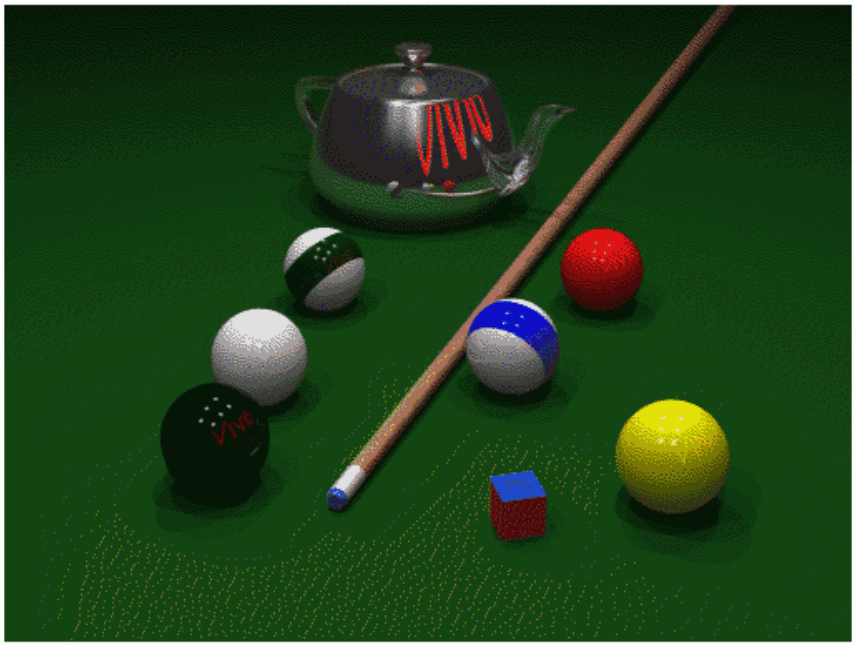
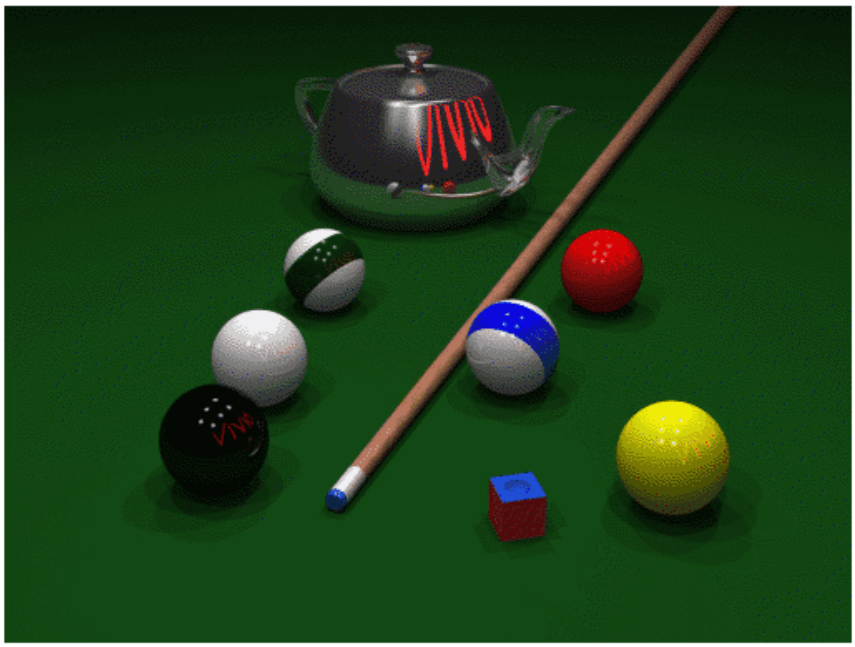
```
clc;
close all;
clear all;

I=imread('pool.png');
for J=2:20:122
    figure;
    [x,map]=rgb2ind(I,J);
    imshow(x,map);
    title(strcat('Indexed image(',int2str(J),' Colors)'));
end
for J=2:20:122
    figure;
    [x,map]=rgb2ind(I,J);
    subplot(2,2,1);
    imshow(x);
    title('Image befor histogram equalization');
    subplot(2,2,2);
    bar(imhist(x),'b');
    title('Original Histogram');
    g=histeq(x);
    subplot(2,2,3);
    imshow(g);
    title('Image after histogram equalization');
    subplot(2,2,4);
    bar(imhist(g),'b');
    title('Equalized Histogram');
end
```

Indexed image(2 Colors)

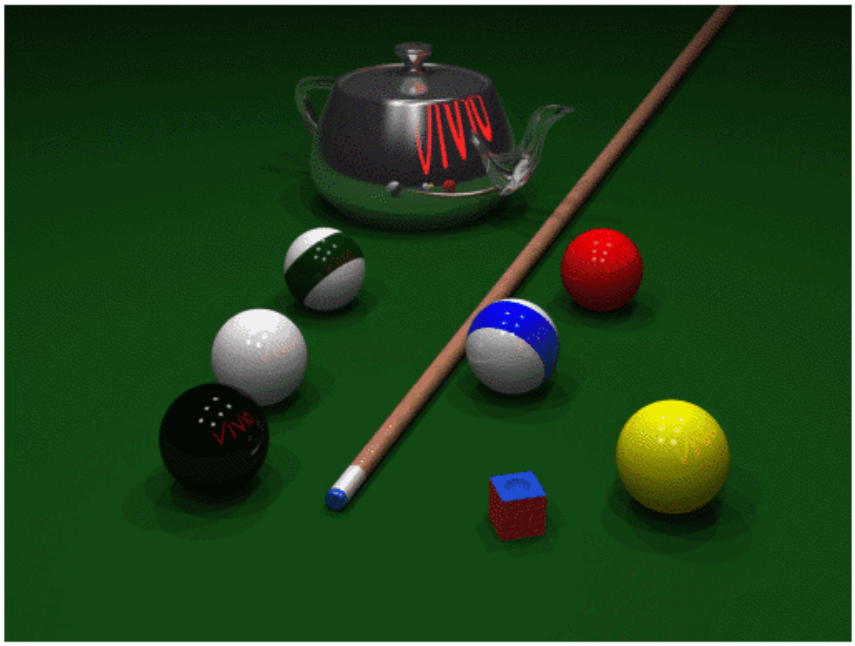
Indexed image(22 Colors)



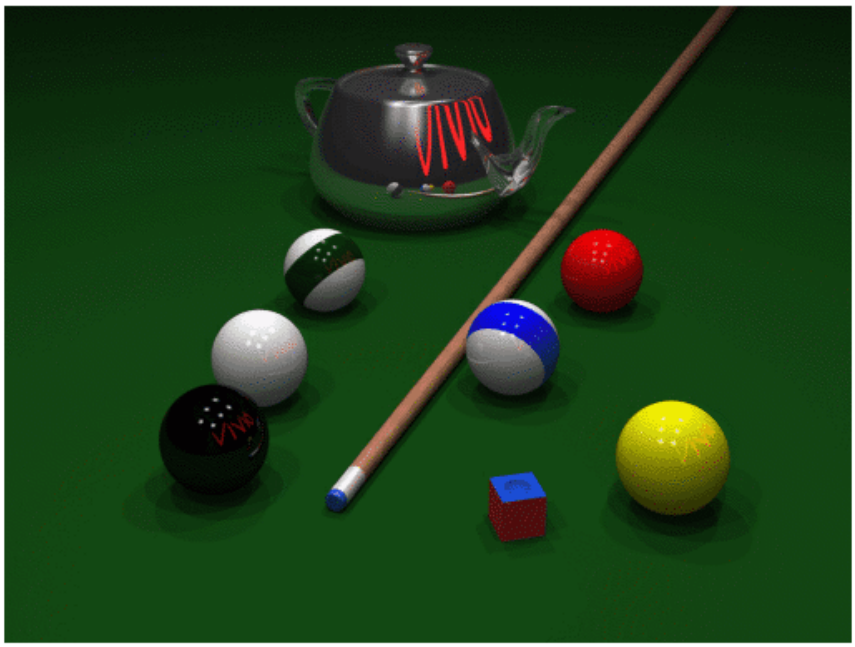
Indexed image(42 Colors)



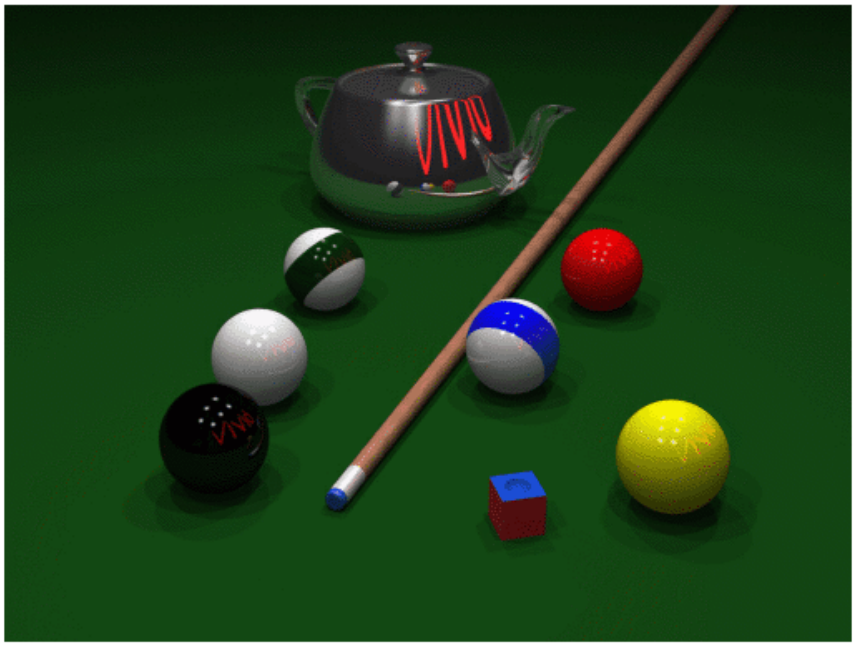
Indexed image(62 Colors)



Indexed image(82 Colors)



Indexed image(102 Colors)



Indexed image(122 Colors)

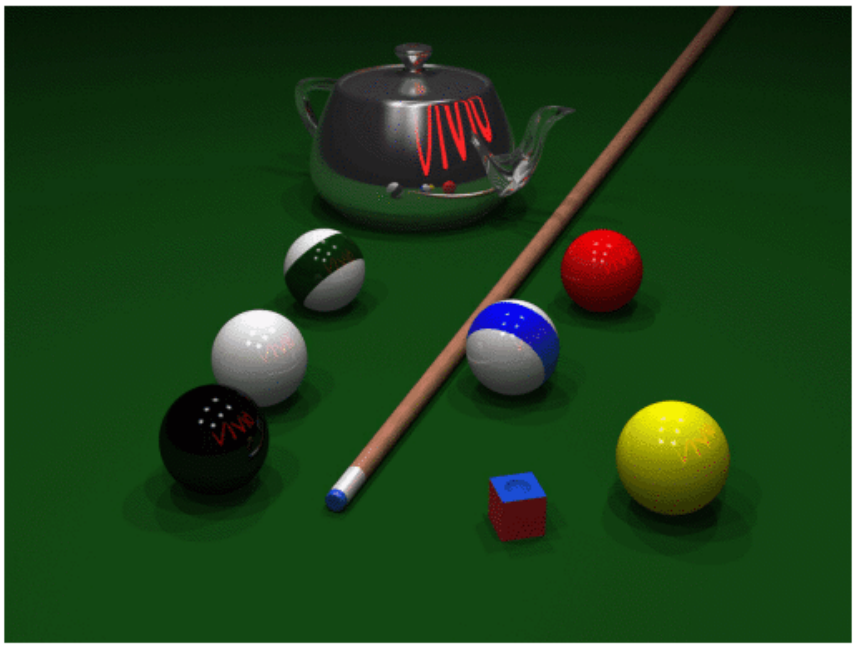


Image befor histogram equalization

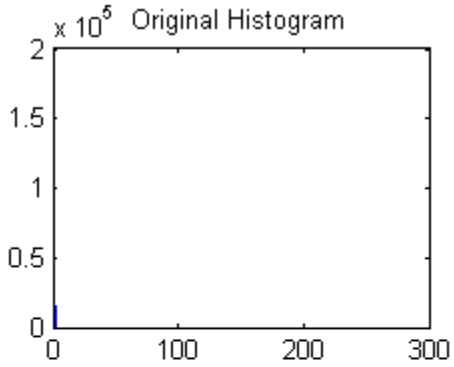


Image after histogram equalization

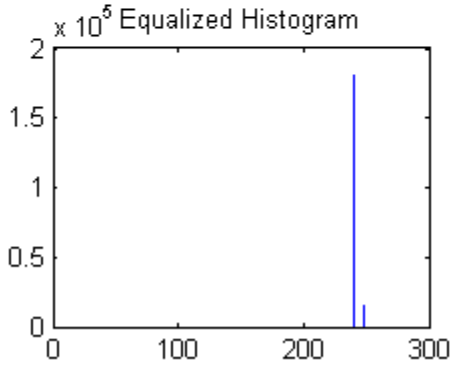


Image befor histogram equalization

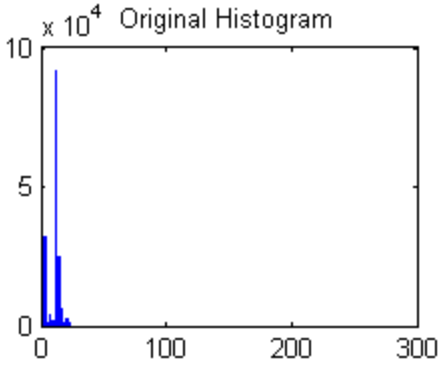
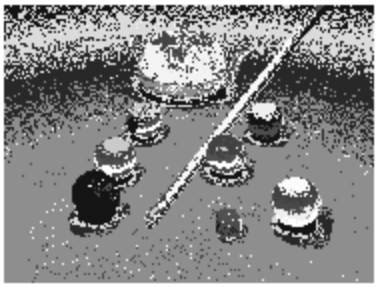


Image after histogram equalization



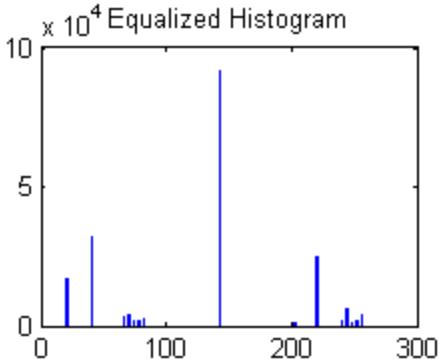
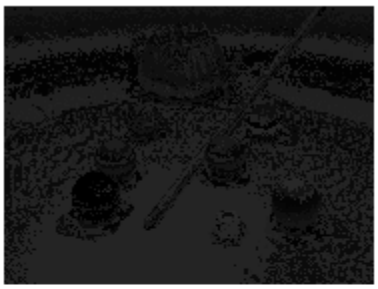


Image befor histogram equalization



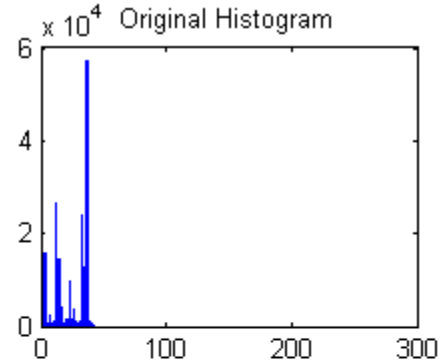
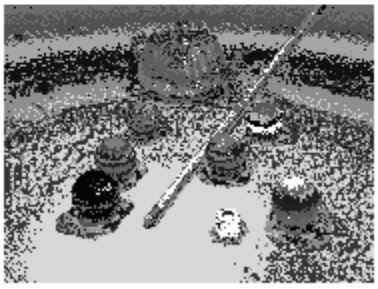


Image after histogram equalization



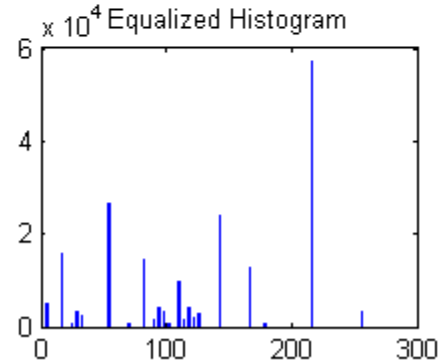
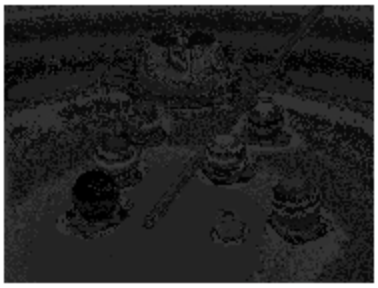


Image befor histogram equalization



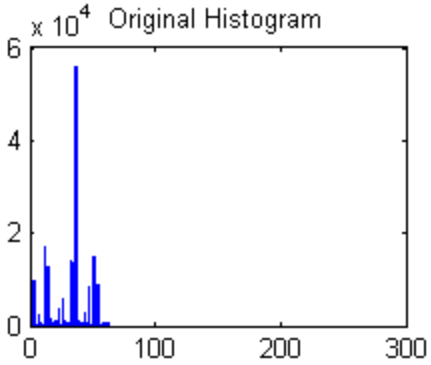


Image after histogram equalization

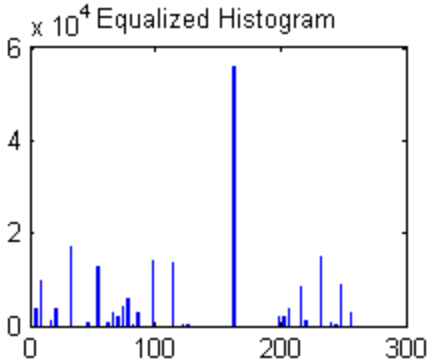
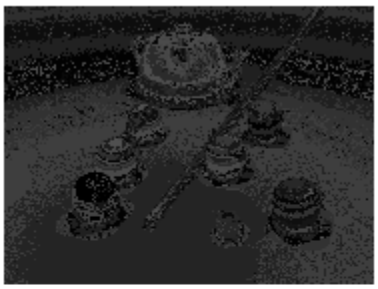


Image befor histogram equalization



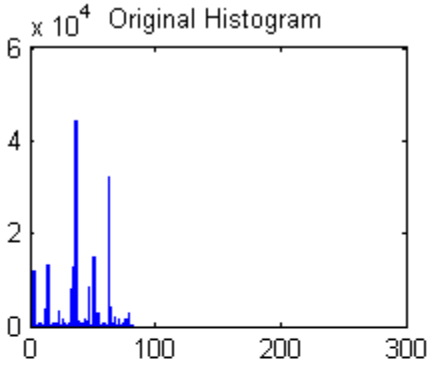
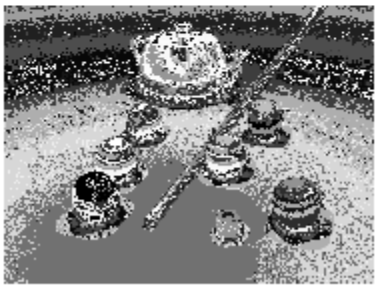


Image after histogram equalization



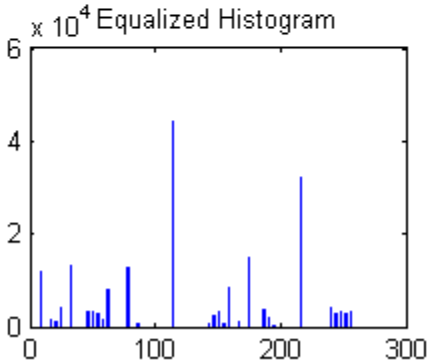
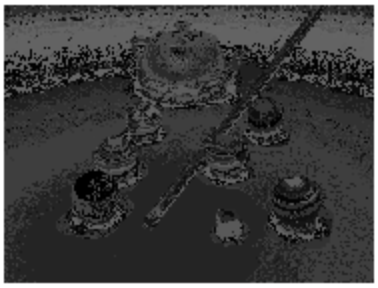


Image befor histogram equalization



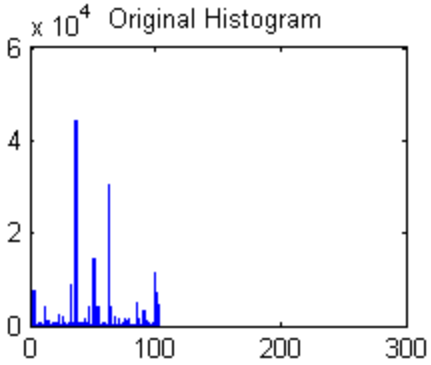


Image after histogram equalization

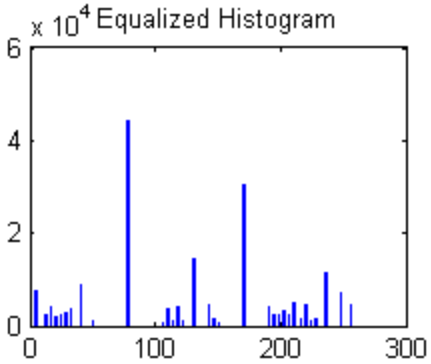
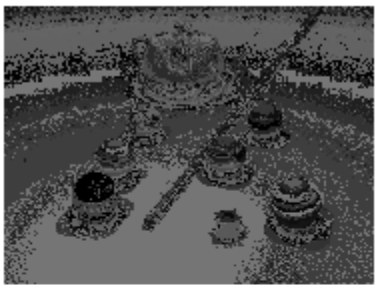


Image befor histogram equalization



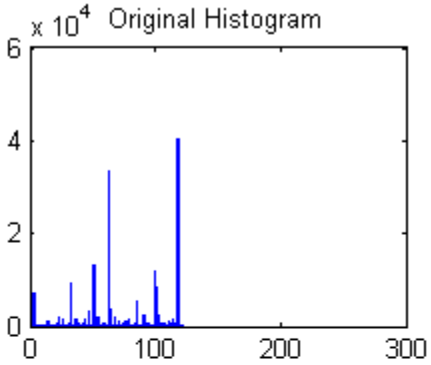
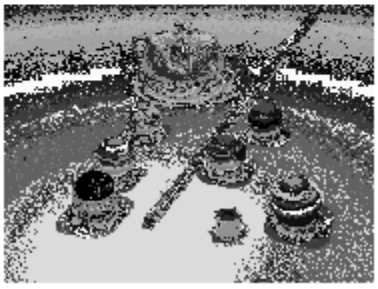
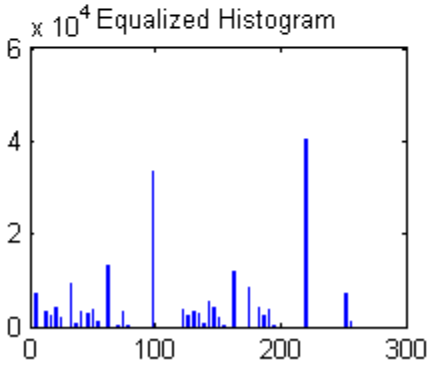


Image after histogram equalization





Published with MATLAB® 7.14