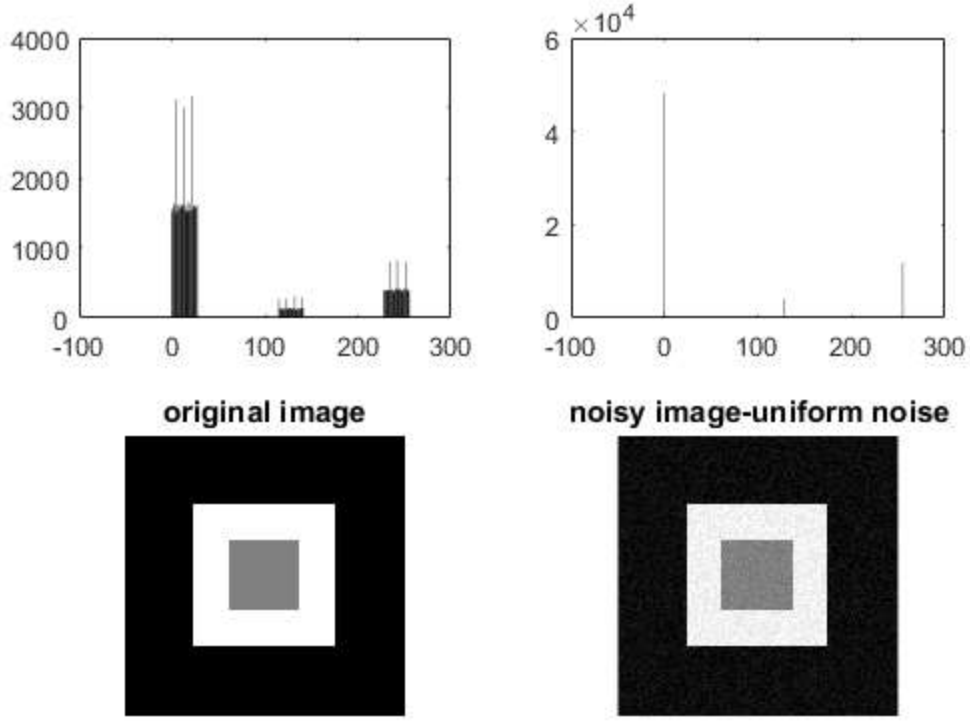
```
a1=(imread('Test_Image.jpg'));
[m,n]=size(a1);
z=uint8(randi([10,40],m,n));

noizy_a=double(a1)+ double(z);
noisy=imhist(mat2gray(noizy_a));
original=imhist((a1));

subplot(2,2,1), bar(0:255,noisy)
subplot(2,2,2) , bar(0:255,original)
subplot(2,2,3)
imshow(a1);
title('original image')
subplot(2,2,4)
imshow(noizy_a,[])
title('noisy image-uniform noise')
```



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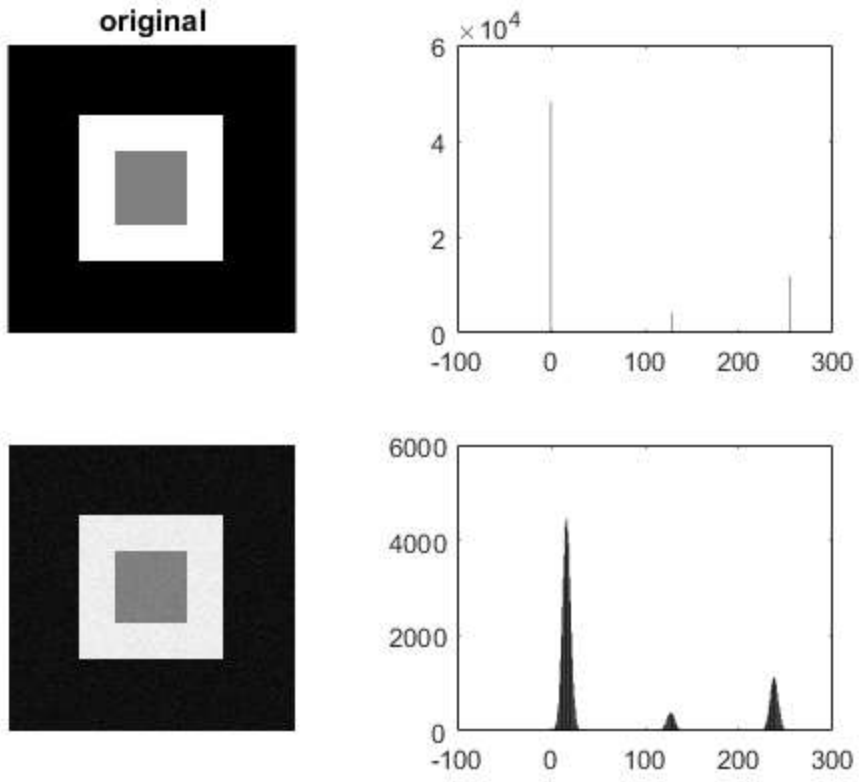
```
clear;
img2=imread('Test_Image.jpg');
[m,n] = size(img2);

subplot(2,2,1);
imshow(img2);
title('original');
h1 = imhist(img2);
subplot(2,2,2),bar(0:255,h1);

r = 1 + 5.*randn(m,n);
r = r + double(img2);
subplot(2,2,3);
imshow(r,[]);

h = imhist(mat2gray(r));
subplot(2,2,4),bar(0:255,h);
```



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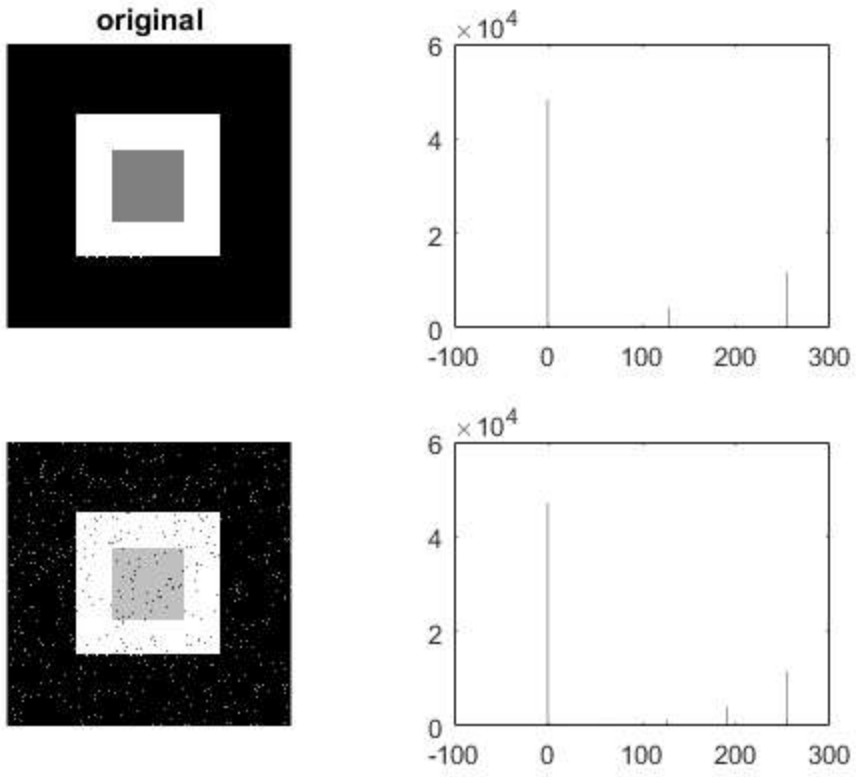
```
clear;
img2=imread('Test_Image.jpg');
[m,n] = size(img2);

subplot(2,2,1);
imshow(img2);
title('original');
h1 = imhist(img2);
subplot(2,2,2),bar(0:255,h1);

r = double(1 + 5.*imnoise(img2,'salt & pepper'));
r = r + double(img2);
subplot(2,2,3);
imshow(r,[]);

h = imhist(mat2gray(r));
subplot(2,2,4),bar(0:255,h);
```



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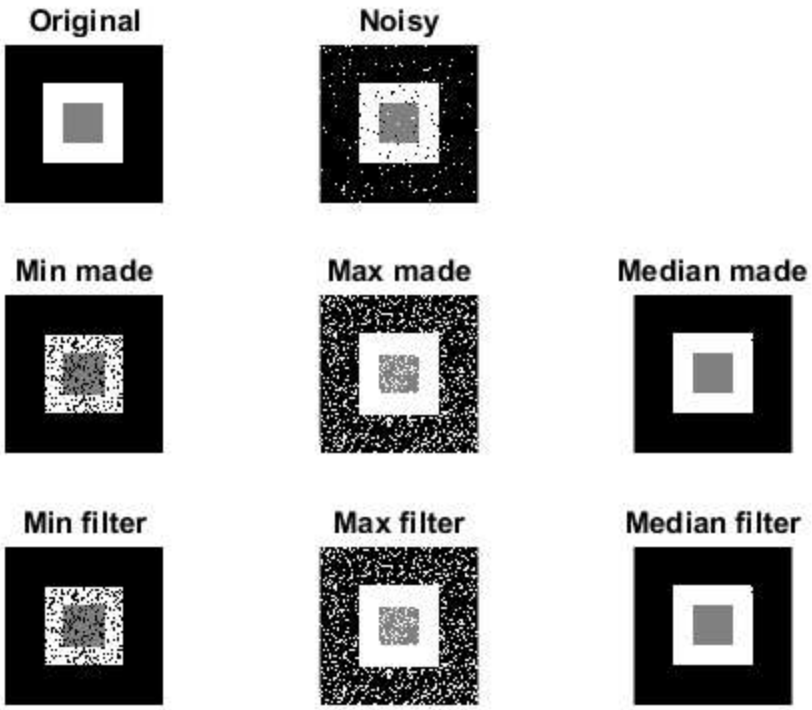
```
img = imread('Test_Image.jpg');
subplot(3,3,1);
imshow(img);
title('Original');

noisy = imnoise(img,'salt & pepper');
subplot(3,3,2);
imshow(noisy);
title('Noisy');

[m,n] = size(img);
m1 = 3;
n1 = 3;
filter = ones(m1,n1);
a = 1;
b = 1;
new = zeros(m+(2*a),n+(2*b));
new(1+a:m+a,1+b:n+b) = noisy;

for i = 1 : m
    for j = 1 : n
        temp = new(i:i+m1-1,j:j+n1-1);
        x1(i, j) = min(min(temp .* filter));
    end
end
subplot(3,3,4);
imshow(x1,[]);
title('Min made');

for i = 1 : m
    for j = 1 : n
        temp = new(i:i+m1-1,j:j+n1-1);
        x2(i, j) = max(max(temp .* filter));
    end
end
subplot(3,3,5);
imshow(x2,[]);
title('Max made');

for i = 1 : m
    for j = 1 : n
        temp = new(i:i+m1-1,j:j+n1-1);
        x3(i, j) = median(median(temp .* filter));
    end
end
subplot(3,3,6);
imshow(x3,[]);
title('Median made');

y1 = ordfilt2(noisy, 1, filter);
subplot(3,3,7);
imshow(y1);
title('Min filter');

y2 = ordfilt2(noisy, 9, filter);
subplot(3,3,8);
```

```
imshow(y2);
title('Max filter');

y3 = ordfilt2(noisy, 5, filter);
subplot(3,3,9);
imshow(y3);
title('Median filter');
```



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