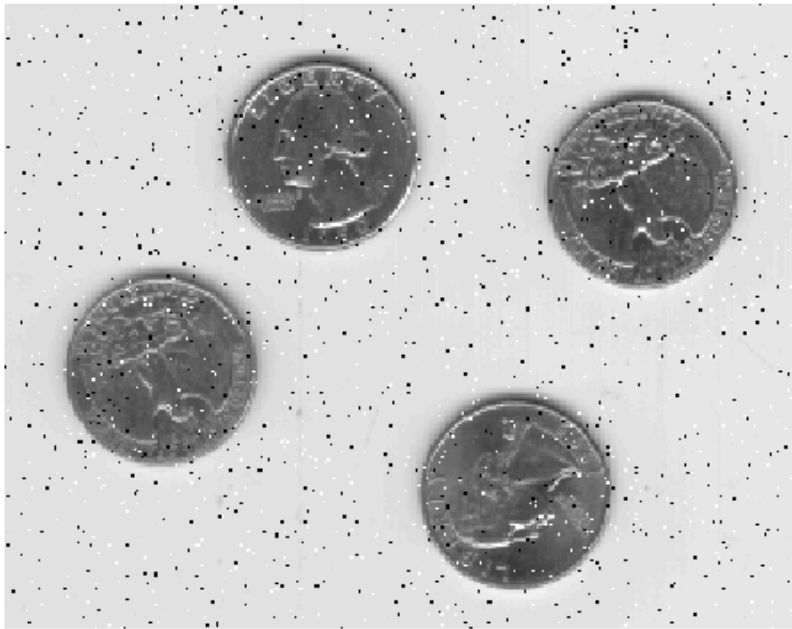


```
% NAME: SHRIRANG ALIAS SAMARTH PATIL
% REG.NO.: 19BAI10079
% Noise Removal
% Remove the noise using average filtering and median filtering
I = imread('eight.tif');
figure
imshow(I);
```



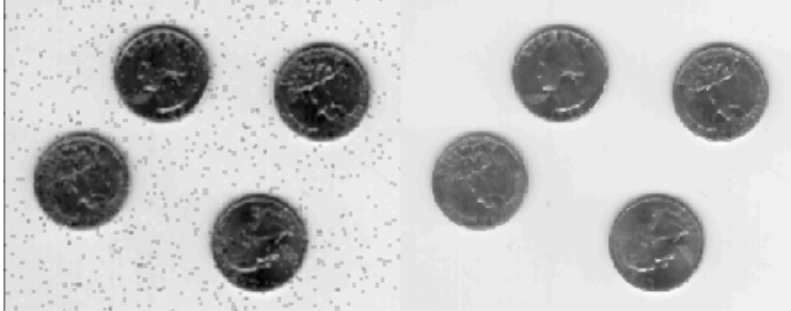
```
% Add salt and pepper noise
J = imnoise(I, 'salt & pepper', 0.02);
figure
imshow(J);
```



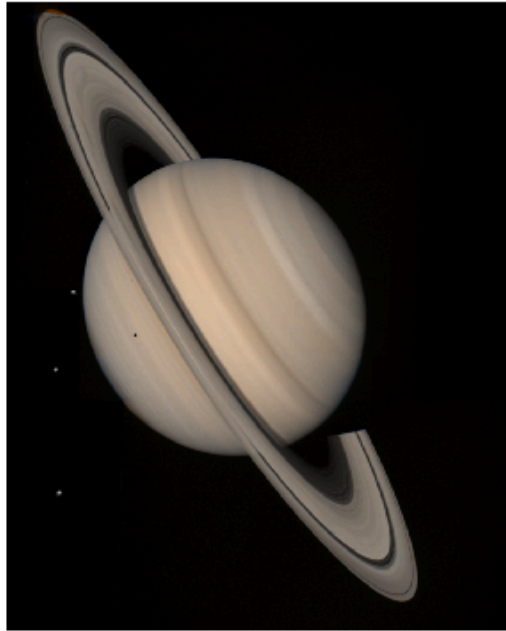
```
% Use averaging filter  
avg_result = filter2(fspecial('average',3),J)/255;  
figure  
imshow(avg_result);
```



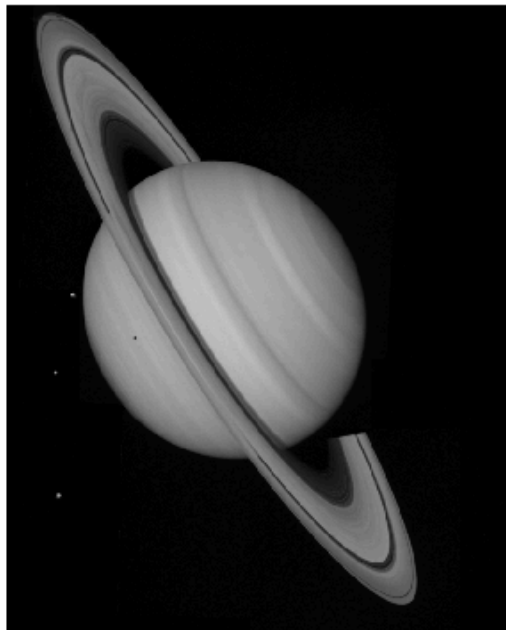
```
% use median filter
median_result = medfilt2(J);
imshowpair(avg_result,median_result,'montage');
```



```
% using adaptive filter (wiener filter)
X = imread('saturn.png');
imshow(X);
```

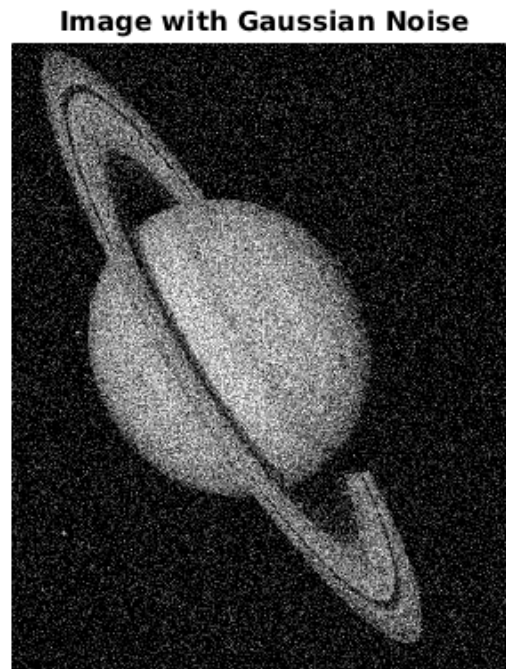


```
I = im2gray(X);  
imshow(I);
```



```
Y = imnoise(I, 'gaussian',0,0.025);
```

```
imshow(Y);  
title('Image with Gaussian Noise');
```



```
result = wiener2(Y,[5,5]);  
figure  
imshow(result);  
title('Noise free Image');
```

Noise free Image

