

```
clear all
```

```
X = imread( 'lenna256.jpg' ); % Unsigned 8-bit integer for storage  
XX = double( X ); % double precision variable for floating point operations  
whos
```

Name	Size	Bytes	Class	Attributes
X	256x256	65536	uint8	
XX	256x256	524288	double	

```
mn = min( min( XX ) )
```

```
mn = 0
```

```
mx = max( max( XX ) )
```

```
mx = 239
```

```
sz = size(XX)
```

```
sz = 1x2
```

```
    256    256
```

```
entry = XX(100,150)
```

```
entry = 173
```

```
XM = X + 1.22;
```

```
XXM = XX + 1.22;
```

```
test1 = min( min( XM ) )
```

```
test1 = uint8
```

```
    1
```

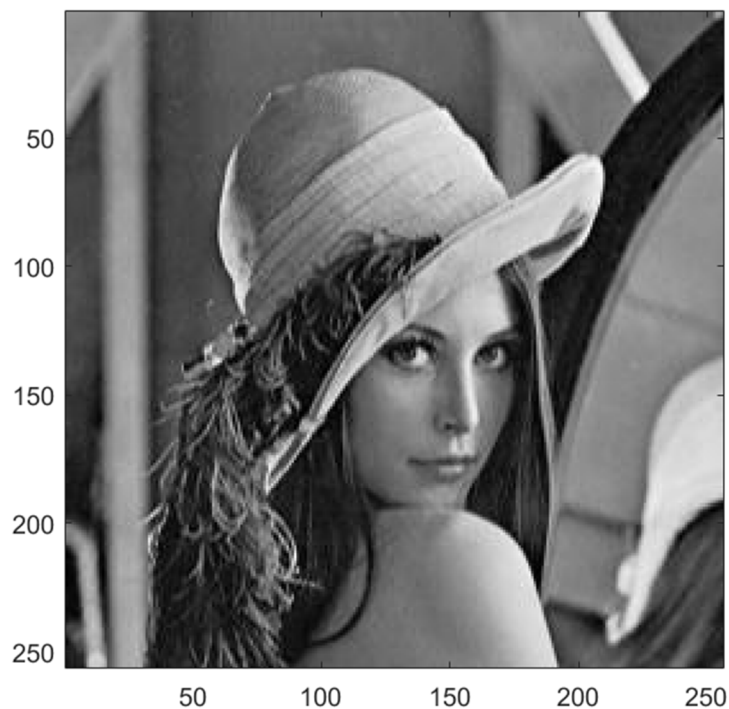
```
test2 = min( min( XXM ) )
```

```
test2 = 1.2200
```

```
imagesc( XX )
```

```
colormap( gray ( 256 ) )
```

```
axis image
```

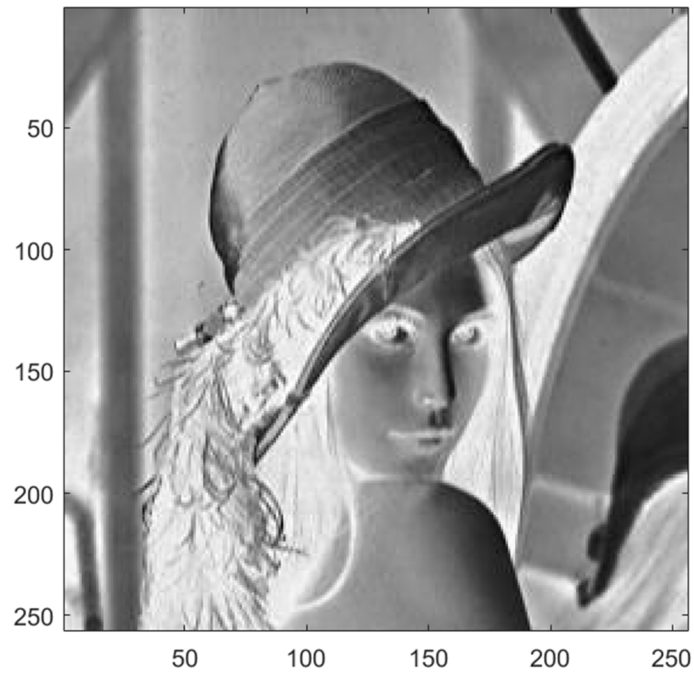


```
Y = max( max( XX ) ) - XX;
```

```
imagesc( Y )
```

```
colormap( gray ( 256 ) )
```

```
axis image
```



```
save lenna256neg.mat Y
clear all
whos % No variables in workspace
load lenna256neg.mat % Create variable Y
whos
```

Name	Size	Bytes	Class	Attributes
Y	256x256	524288	double	

```
imwrite(Y,gray(256),'lenna256neg.bmp','bmp')
dir *.bmp
lenna256neg.bmp
imshow('lenna256neg.bmp')
colormap( gray ( 256 ) )
```



```
Z = imcomplement( Y ); % In image processing toolbox  
imagesc( Z )  
axis image
```

