

Notes and Outputs - Lab 2

```
imfinfo('imageName.png')
```

Workspace			
Name	Value	Size	Class
ans	1×1 struct	1×1	struct

```
RGB = imread('imageName.png');  
imshow(RGB)
```



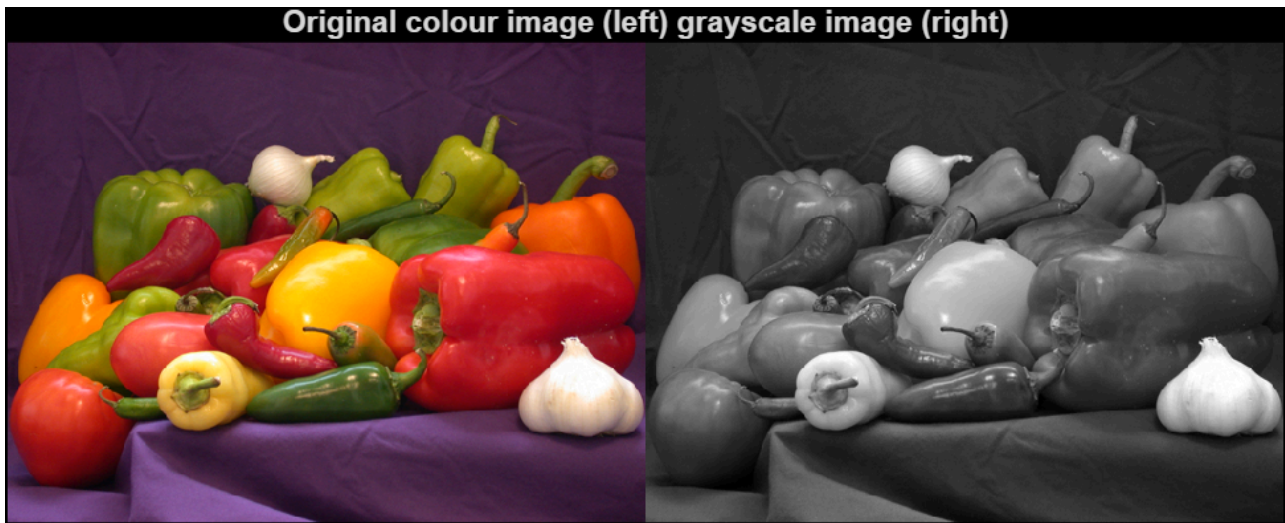
```
I = rgb2gray(RGB);  
figure % start a new figure window 'figure 2'  
imshow(I)
```

I	384×512 ui...	384×512	uint8
RGB	384×512×3 ...	384×512×3	uint8



```
imshowpair(RGB, I, 'montage')
```

```
title('Original colour image (left) grayscale image (right)'); % title
```



Channel Splitting - RGB

```
[R,G,B] = imsplit(RGB);
```

Output:

Workspace				
Name	Value	Size	Class	
B	384×512 ui...	384×512	uint8	
G	384×512 ui...	384×512	uint8	
R	384×512 ui...	384×512	uint8	
RGB	384×512×3 ...	384×512×3	uint8	

```
montage({R, G, B},'Size',[1 3])
```

Output:

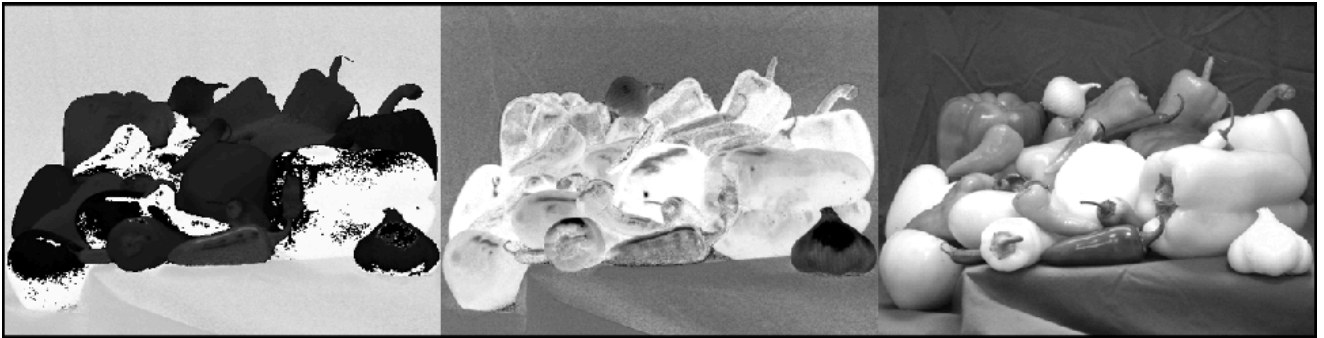


RGB to HSV Channels

```
HSV = rgb2hsv(RGB);  
[H,S,V] = imsplit(HSV);
```

Output - created objects same structure as imread and imsplit(RGB)

```
montage({H,S,V}, 'Size', [1 3])
```



RGB to XYZ Channels

```
XYZ = rgb2xyz(RGB);  
[X,Y,Z] = imsplit(XYZ);
```

Output - created objects same structure as `imread` and `imsplit(RGB)`

```
montage({X,Y,Z}, 'Size', [1 3])
```

