

1. Take a picture of yourself (passport size is enough) and answer/do the following

Save the image as a jpeg file and include in the report

```
img=imread('sid.jpeg');
```

```
subplot(221)
```

```
imshow(img);
```

2.What is the number of independent variables

```
disp("The number of independent variables are 2");
```

3.What is the number of components

```
disp("The number of components are 3 (red,blue,green)");
```

4.Display the individual components of the image

```
red=img;blue=img ; green=img;
```

```
red(:,:,2,3)=0;
```

```
green(:,:,1,3)=0;
```

```
blue(:,:,1,2)=0;;
```

```
subplot(222)
```

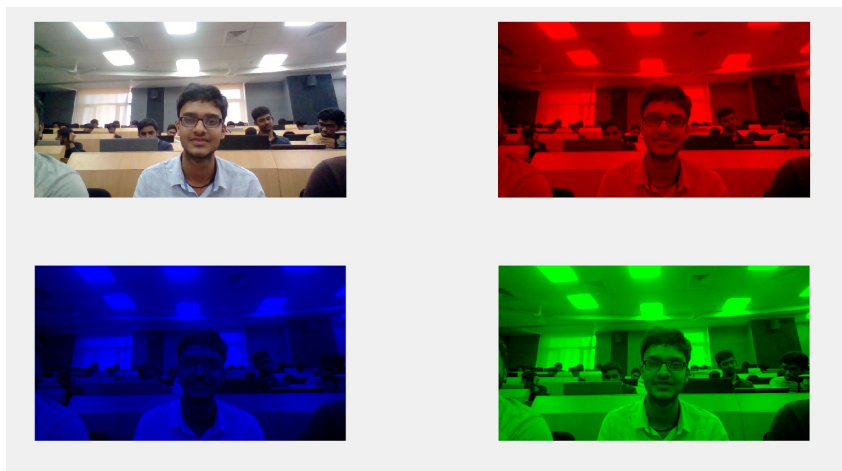
```
imshow(red);
```

```
subplot(223)
```

```
imshow(blue);
```

```
subplot(224)
```

```
imshow(green);
```



5.determine the minimum, mean and maximum of each component

```
min([red(:); green(:); blue(:)])
```

```
max([red(:); green(:); blue(:)])
```

```
mean([red(:); green(:); blue(:)])
```

6.Determine the size of the image

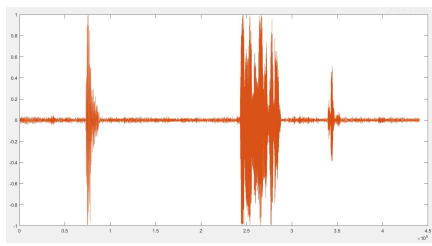
```
size(img)
```

7.Record your voice for a duration of 5 seconds and answer/do the following

Read the signal in matlab and plot all the channels of the signal on

separate figures

```
y = audioread('sidvoice.m4a');
```



8.How many channels are present in the signal

```
disp("There are two channels present");
```

9.Is this signal digital or analog?

```
disp("Signal is analog");
```

10.What is number of the values in the sequence

```
size(y);
```

11.What is the energy of the signal in each channel

12.What is the sample rate?

```
z=audioinfo('sidvoice.m4a');
```

```
disp(z);
```