

```
In [1]: import cv2
import matplotlib.pyplot as plt

# Load the cascade
face_cascade = cv2.CascadeClassifier('haarcascade_frontalface_default.xml')
eye_cascade = cv2.CascadeClassifier('haarcascade_eye.xml')
# Read the input image
img = cv2.imread('C:/Users/Anm Faisal/Desktop/Friends95.jpg')
# Convert into grayscale
RGB = cv2.cvtColor(img, cv2.COLOR_BGR2RGB)
plt.imshow(RGB)
```

Out[1]: <matplotlib.image.AxesImage at 0x3c7ea04e0>



```
In [2]: GRAY = cv2.cvtColor(img, cv2.COLOR_RGB2GRAY)
plt.imshow(GRAY)
```

Out[2]: <matplotlib.image.AxesImage at 0x3c8175908>



```
In [12]: imgplot = plt.imshow(GRAY, 'gray')
plt.show()
```



```
In [6]: h,w = GRAY.shape
print (h,w)
```

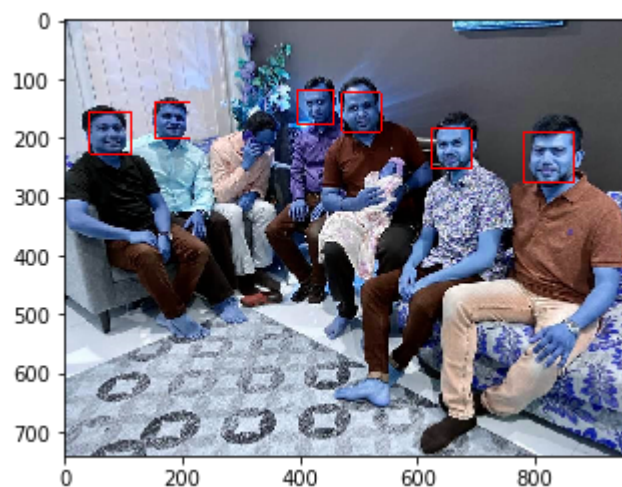
741 960

```
In [8]: size = GRAY.size
print(size)
```

711360

```
In [19]: faces = face_cascade.detectMultiScale(GRAY, 1.3, 5)
for (x,y,w,h) in faces:
    cv2.rectangle(img,(x,y),(x+w,y+h),(255,0,0),2)
    roi_gray = GRAY[y:y+h, x:x+w]
    roi_color = img[y:y+h, x:x+w]
eyes = eye_cascade.detectMultiScale(roi_gray)
for (ex,ey,ew,eh) in eyes:
    cv2.rectangle(roi_color,(ex,ey),(ex+ew,ey+eh),(0,255,0),2)
plt.imshow(img)
```

Out[19]: <matplotlib.image.AxesImage at 0x3c87f1c18>



```
In [ ]: cv2.imshow('img',img)
cv2.waitKey(0)
cv2.destroyAllWindows()
```