```
In [ ]:   ## pip install opencv-python
```

Import Modules

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

HAAR Cascade File Path

```
In [2]:   face_cascade = cv2.CascadeClassifier(cv2.data.haarcascades+'haarcascade_fror
```

Load the Image

```
In [88]:  image = cv2.imread('test image.jpg')
          # convert to rgb
          img_rgb = cv2.cvtColor(image, cv2.COLOR_BGR2RGB)
          plt.imshow(img_rgb)
```
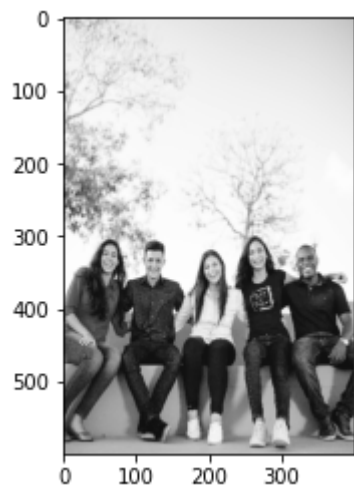
Out[88]: `<matplotlib.image.AxesImage at 0x2333898a4f0>`


```
In [89]:  # resize the image
          image = cv2.resize(image, (400, 600))
```

```
In [90]:  # convert to gray scale image
          gray = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)
          plt.imshow(gray, cmap='gray')
```

Out[90]: `<matplotlib.image.AxesImage at 0x23338e498b0>`

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Detect Faces

In [103…] `faces = face_cascade.detectMultiScale(gray)`

In [104…] `len(faces)`

Out[104]: 5

In [105…]
```python
# diplay the faces in the image
for (x, y, w, h) in faces:
    cv2.rectangle(image, (x, y), (x+w, y+h), (0, 255, 0), 2)
cv2.imshow("Faces ",image)
cv2.waitKey(0)
```

Out[105]: 13

In [ ]:

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