# face detection problem

```
import cv2
facecascade=cv2.CascadeClassifier('/content/haarcascade_frontalface_default.xml')
```

```
from google.colab.patches import cv2_imshow
image=cv2.imread('/content/group of ppl.jpg')
cv2_imshow(image)
image.shape[:2]
```

```
(183, 275)
```

```
gray=cv2.cvtColor(image,cv2.COLOR_BGR2GRAY)
cv2_imshow(gray)
```

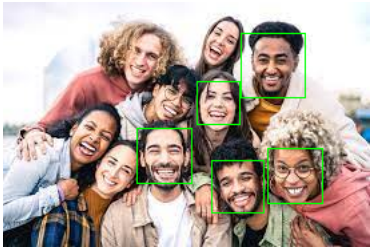
```
#face dedection
faces=facecascade.detectMultiScale(
    gray,
    scaleFactor=1.1,            #how much the image size is reduced
    minNeighbors=5,             #min munber of images to detect
    minSize=(5,5)            #min size of image
)
```

```
print("Found {0} faces".format(len(faces)))
```

```
Found 5 faces
```

```
#rectangle
for (x,y,w,h) in faces:
  cv2.rectangle(image,(x,y),(x+w,y+h),(0,255,0),1)
```

```
cv2_imshow(image)
```



```
image1=cv2.imread('/content/grp of ppl.jpg')
cv2_imshow(image1)
image1.shape[:2]
```

```
(183, 275)
```

```
gray=cv2.cvtColor(image1,cv2.COLOR_BGR2GRAY)
cv2_imshow(gray)
```

```
faces=facecascade.detectMultiScale(
    gray,
    scaleFactor=1.1,
    minNeighbors=5,
    minSize=(10,10)
)
```

```
print("found {0} faces.".format(len(faces)))
```

```
 found 4 faces.
```

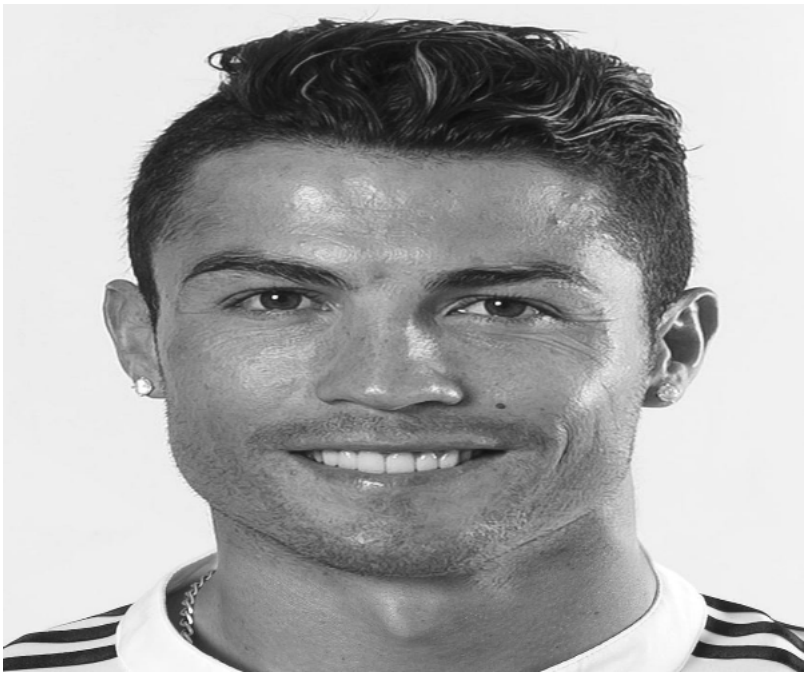
```
for (x,y,w,h) in faces:
  cv2.rectangle(image1,(x,y),(x+w,y+h),(0,255,255),1)
```

```
cv2_imshow(image1)
```

```
face_img=cv2.imread('/content/cr7face.jpg')
cv2_imshow(face_img)
face_img.shape[:2]
```

```
face_img=cv2.resize(face_img,(600,500))
cv2_imshow(face_img)
```

```
gray=cv2.cvtColor(face_img,cv2.COLOR_BGR2GRAY)
cv2_imshow(gray)
```



```
faces1=facecascade.detectMultiScale(
    gray,
    scaleFactor=1.1,
    minNeighbors=5,
    minSize=(10,10)
)


print("found {0} face".format(len(faces1)))
```

```
found 1 face
```

```
for (x,y,w,h) in faces1:
  cv2.rectangle(face_img,(x,y),(x+w,y+h),(0,255,255),1)


cv2_imshow(face_img)
```