

TASK: FACE DETECTION USING LIVE STREAM IN OPENCV PYTHON

PROGRAM

```
import cv2

#below XML classifiers describes some features of face object
face_cascade =
cv2.CascadeClassifier('haarcascade_frontalface_default.xml')

cap = cv2.VideoCapture(0)

while 1:

    ret, img = cap.read()

    gray = cv2.cvtColor(img, cv2.COLOR_BGR2GRAY)

    face = face_cascade.detectMultiScale(gray, 1.3, 5)

    for (x,y,w,h) in face:

        # To draw a rectangle in a face
        cv2.rectangle(img,(x,y),(x+w,y+h),(255,255,0),2)

        roi_gray = gray[y:y+h, x:x+w]
        roi_color = img[y:y+h, x:x+w]

    cv2.imshow('img',img)

    k = cv2.waitKey(30) & 0xff

    if k == 27:

        break
```

```
cap.release()
```

```
cv2.destroyAllWindows()
```

OUTPUT:

