**Assignment 9**

Develop a python code to detect any object using Haar cascade classifier.

import cv2

face\_classifier=cv2.CascadeClassifier("haarcascade\_frontalface\_default.xml")

eye\_classifier=cv2.CascadeClassifier("haarcascade\_eye.xml")

#It will read the first frame/image of the video

video=cv2.VideoCapture("Face.mp4")

while True:

#capture the first frame

check,frame=video.read()

frame = cv2.resize(frame,(600,400))

gray=cv2.cvtColor(frame, cv2.COLOR\_BGR2GRAY)

#detect the faces from the video using detectMultiScale function

faces=face\_classifier.detectMultiScale(gray,1.3,5)

eyes=eye\_classifier.detectMultiScale(gray,1.3,5)

print(faces)

#drawing rectangle boundries for the detected face

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

cv2.rectangle(frame, (x,y), (x+w,y+h), (127,0,255), 2)

cv2.imshow('Face detection', frame)

#picname=datetime.datetime.now().strftime("%y-%m-%d-%H-%M")

#cv2.imwrite(picname+".jpg",frame)

#drawing rectangle boundries for the detected eyes

for(ex,ey,ew,eh) in eyes:

cv2.rectangle(frame, (ex,ey), (ex+ew,ey+eh), (127,0,255), 2)

cv2.imshow('Face detection', frame)

#waitKey(1)- for every 1 millisecond new frame will be captured

Key=cv2.waitKey(1)

if Key==ord('q'):

#release the camera

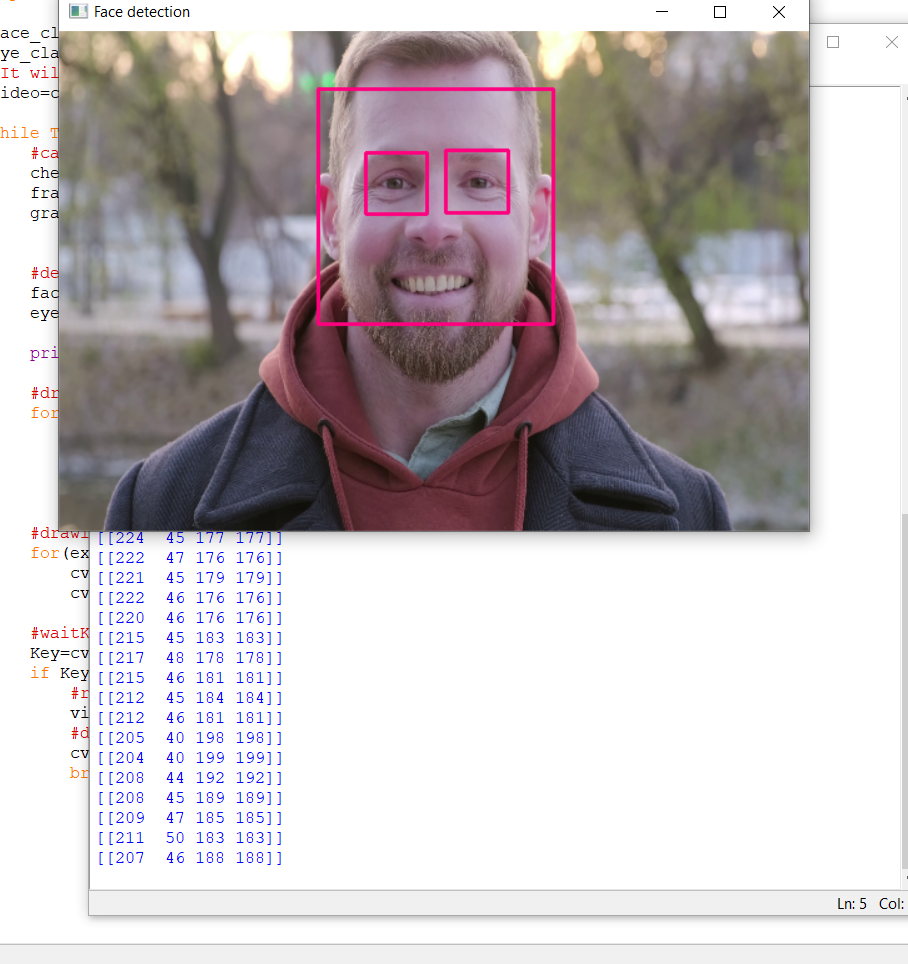
video.release()

#destroy all windows

cv2.destroyAllWindows()

break

**Output:**

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