Assignment 9

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CODE:

```
import cv2
import datetime

car_classifier=cv2.CascadeClassifier("cars.xml")
#It will read the first frame/image of the video
video=cv2.VideoCapture('dataset_video1.avi')

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
    cars=car_classifier.detectMultiScale(gray,1.3,5)

    print(cars)

    #drawing rectangle boundries for the detected face
    for(x,y,w,h) in cars:
        cv2.rectangle(frame, (x,y), (x+w,y+h), (127,0,255), 2)
        cv2.imshow('Car Detetion', frame)
        picname=datetime.datetime.now().strftime("%y-%m-%d-%H-%M")
        cv2.imwrite(picname+".jpg",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: