**Assignment-6**

**Python code:**

import cv2

print(cv2.\_\_version\_\_)

cascade\_src = 'cars.xml'

video\_src = 'dataset/video1.avi'

#video\_src = 'dataset/video2.avi'

cap = cv2.VideoCapture(video\_src)

car\_cascade = cv2.CascadeClassifier(cascade\_src)

while True:

ret, img = cap.read()

if (type(img) == type(None)):

break

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

cars = car\_cascade.detectMultiScale(gray, 1.1, 1)

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

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

cv2.imshow('video', img)

if cv2.waitKey(33) == 27:

break

cv2.destroyAllWindows()

**Python Output:**

