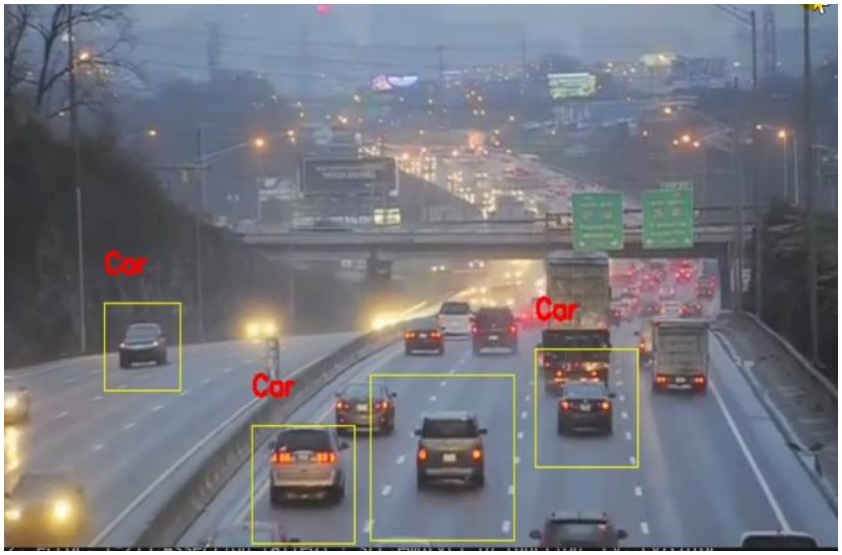
Assignment 6

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

After running the code, the yellow rectangles will be drawn around the car with the red text stating 'car' at top

```
import cv2
import time
import numpy as np

# Create our body classifier
car_classifier = cv2.CascadeClassifier('haarcascade_car.xml') #XML file

# Initiate video capture for video file
cap = cv2.VideoCapture('carvideo2.mp4') # write "0" if you want primary camera to access as
 input


# Loop once video is successfully loaded
while cap.isOpened():

    time.sleep(0.5) # reducing the frame rate of the video given
    # Read first frame
    ret, frame = cap.read()
    gray = cv2.cvtColor(frame, cv2.COLOR_BGR2GRAY)


    # Pass frame to our car classifier
    cars = car_classifier.detectMultiScale(gray, 1.4, 2)

    # Extract bounding boxes for any bodies identified
    for (x,y,w,h) in cars:
        cv2.rectangle(frame, (x, y), (x+w, y+h), (0, 255, 255), )
        cv2.imshow('Cars', frame)
        cv2.putText(frame, 'Car', (x,y-20), cv2.FONT_HERSHEY_SIMPLEX, 0.6, (0,0,255), 2)

    if cv2.waitKey(1) == ord('q'):
        break

cap.release()
cv2.destroyAllWindows()
```


Car
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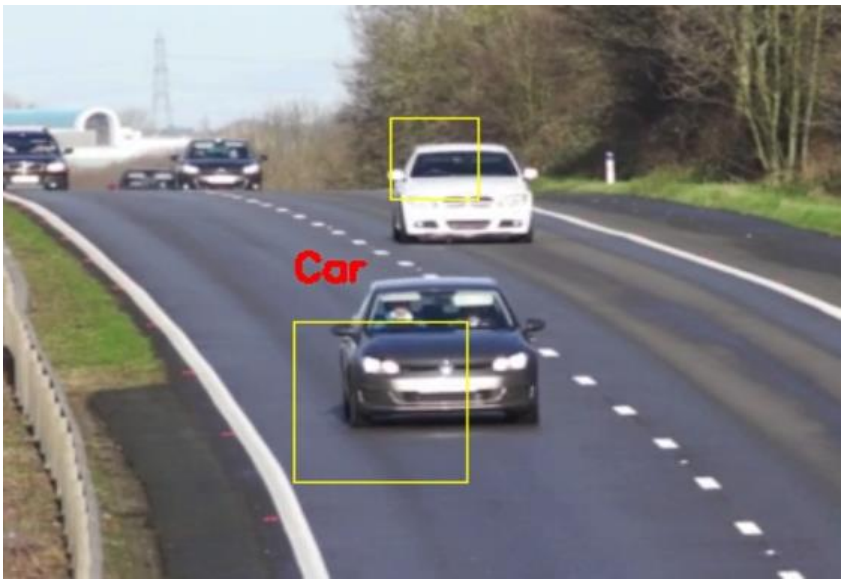
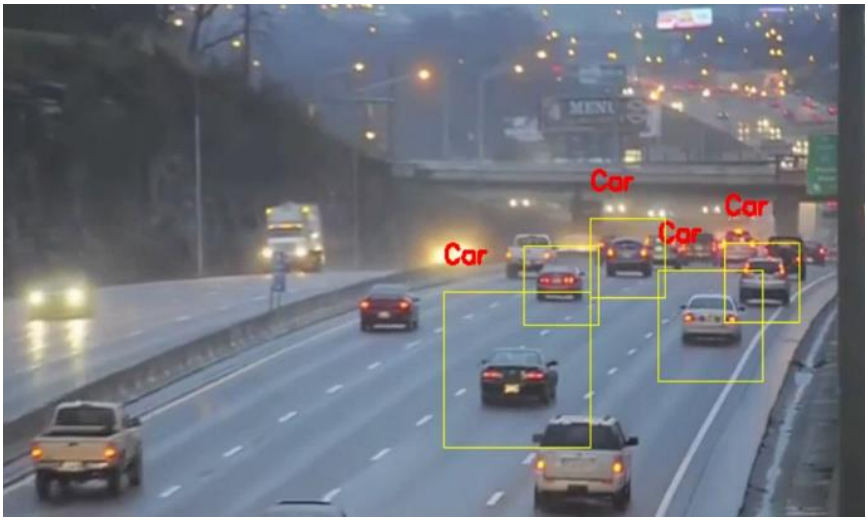
Car


Car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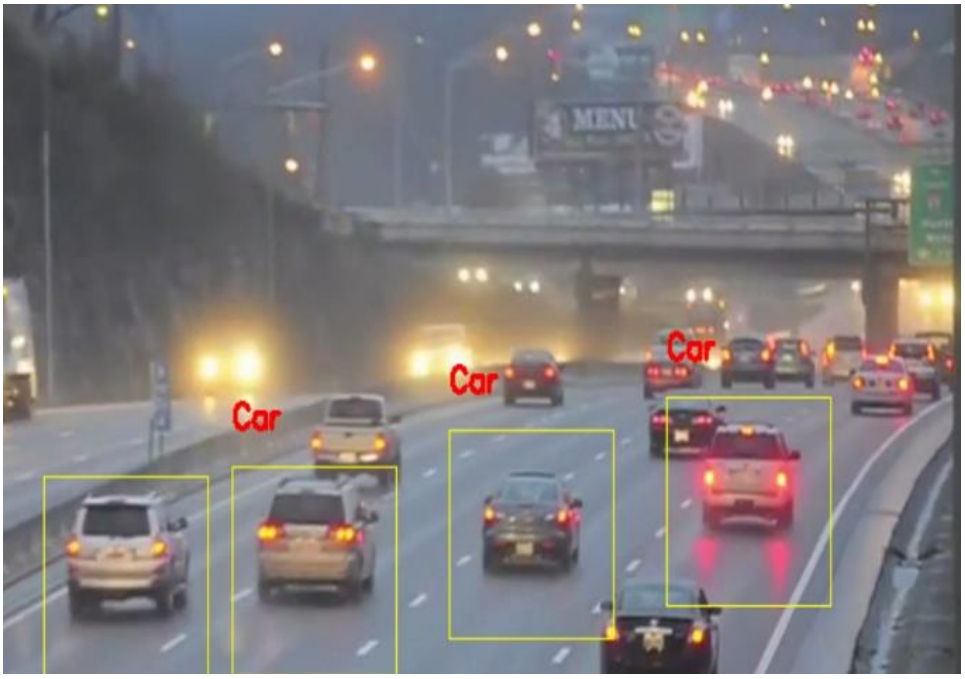
Car
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