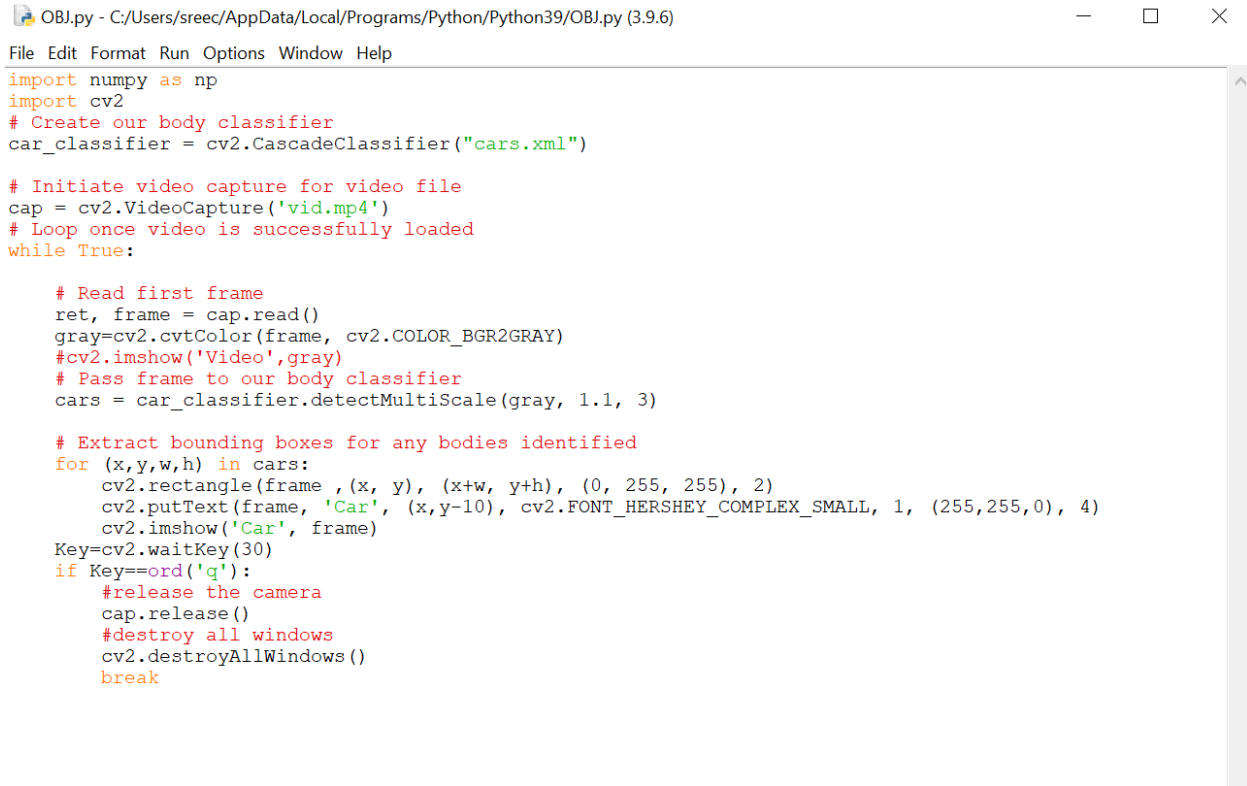


Assignment 6

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



The screenshot shows a Python IDE window titled 'OBJ.py - C:/Users/sreec/AppData/Local/Programs/Python/Python39/OBJ.py (3.9.6)'. The code is as follows:

```

import numpy as np
import cv2
# Create our body classifier
car_classifier = cv2.CascadeClassifier("cars.xml")

# Initiate video capture for video file
cap = cv2.VideoCapture('vid.mp4')
# Loop once video is successfully loaded
while True:

    # Read first frame
    ret, frame = cap.read()
    gray=cv2.cvtColor(frame, cv2.COLOR_BGR2GRAY)
    #cv2.imshow('Video',gray)
    # Pass frame to our body classifier
    cars = car_classifier.detectMultiScale(gray, 1.1, 3)

    # 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), 2)
        cv2.putText(frame, 'Car', (x,y-10), cv2.FONT_HERSHEY_COMPLEX_SMALL, 1, (255,255,0), 4)
        cv2.imshow('Car', frame)
    Key=cv2.waitKey(30)
    if Key==ord('q'):
        #release the camera
        cap.release()
        #destroy all windows
        cv2.destroyAllWindows()
        break

```

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