ASSIGNMENT 6

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

CODE

```python
import cv2
import time
import numpy as np

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

# Initiate video capture for video file
cap = cv2.VideoCapture('cars.mp4')

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

    time.sleep(.05)
    # 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), 2)
        cv2.imshow('Cars', frame)

    if cv2.waitKey(1) == 13:  # 13 is the Enter Key
        break

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