ASSIGNMENT-6

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

CODE:

```
CarDetection.py - C:\Users\gulsh\OneDrive\Desktop\Object_Detection\CarDetection.py (3.9.6)
File Edit Format Run Options Window Help
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('Traffic - 27260.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()
```

OUTPUT: