Assignment-6

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

Requirement – 1. Python
2. Haar cascade XML files

Working - Here we develop a python code with the help of Haar Cascade classifier for the detection of a full body of human and car. When the following is detected in a video then a rectangular box is made surrounding them and 'CAR' is displayed

Python code:

```
import cv2

car_classifier=cv2.CascadeClassifier("haarcascade_car.xml")
video=cv2.VideoCapture('carvideo.mp4')

while True:
    check,frame=video.read()
    gray=cv2.cvtColor(frame, cv2.COLOR_BGR2GRAY)


    car=car_classifier.detectMultiScale(gray,1.3,5)

    print(car)

    for(x,y,w,h) in car:
        cv2.rectangle(frame, (x,y), (x+w,y+h), (127,0,255), 2)
```

```
    cv2.imshow('Car detection', frame)
    cv2.putText(frame,'CAR',(x,y-
10),cv2.FONT_HERSHEY_COMPLEX_SMALL,1,(255,255,0),4)



  Key=cv2.waitKey(1)
  if Key==ord('q') and Key==25000:
    #release the camera
    video.release()
    #destroy all windows
    cv2.destroyAllWindows()
    break
```

RESULT: