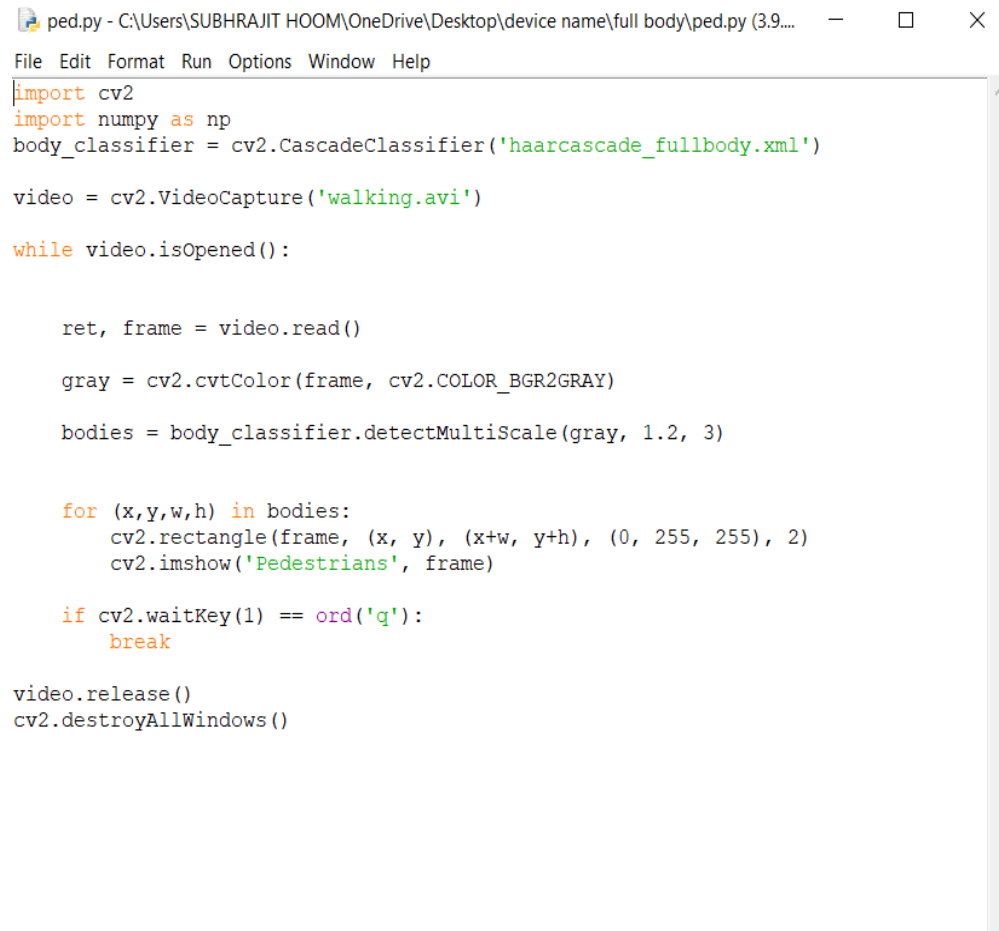


ASSIGNMENT 6

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

CODE:

A screenshot of a Python IDE window titled 'ped.py - C:\Users\SUBHRAJIT HOOM\OneDrive\Desktop\device name\full body\ped.py (3.9...'. The window has a menu bar with 'File', 'Edit', 'Format', 'Run', 'Options', 'Window', and 'Help'. The code is written in a light blue font on a white background. It imports 'cv2' and 'numpy as np', initializes a 'body_classifier' with 'haarcascade_fullbody.xml', and opens a video file 'walking.avi'. A 'while' loop checks if the video is opened, reads frames, converts them to grayscale, and uses 'detectMultiScale' to find bodies. For each body, a rectangle is drawn, and the frame is shown. A 'break' statement is triggered by pressing 'q'. Finally, the video is released and all windows are destroyed.

```
import cv2
import numpy as np
body_classifier = cv2.CascadeClassifier('haarcascade_fullbody.xml')

video = cv2.VideoCapture('walking.avi')

while video.isOpened():

    ret, frame = video.read()

    gray = cv2.cvtColor(frame, cv2.COLOR_BGR2GRAY)

    bodies = body_classifier.detectMultiScale(gray, 1.2, 3)

    for (x,y,w,h) in bodies:
        cv2.rectangle(frame, (x, y), (x+w, y+h), (0, 255, 255), 2)
        cv2.imshow('Pedestrians', frame)

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

video.release()
cv2.destroyAllWindows()
```

OUTPUT:

