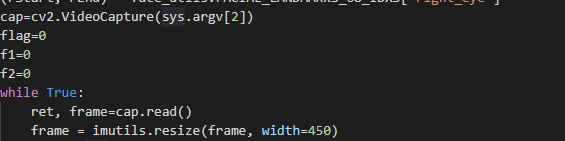
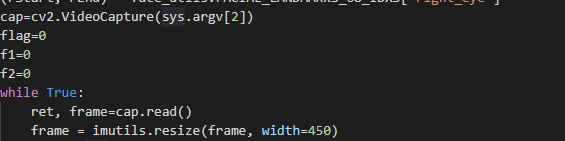
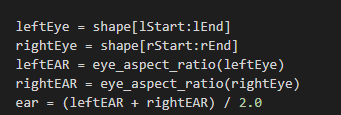
First Part : Import DataSet

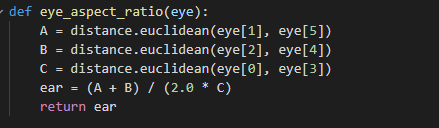
We use cv2 to get picture from training video

  
after this we pre trained model 68 landsmark to detect faces from frames & we use face\_utile for get eye marks from model



We use this marks (6 for left eye / 6 for right ) to calculate the EAR



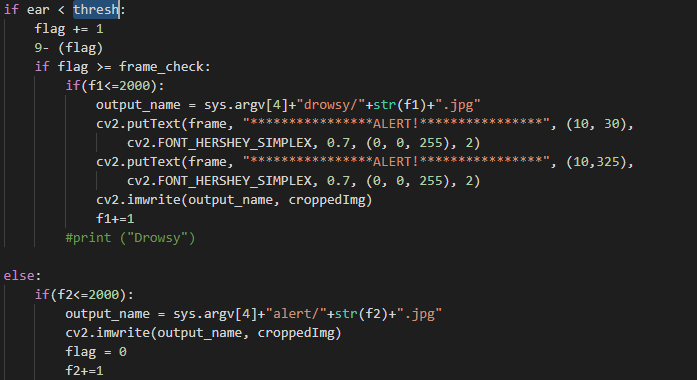


Then if ear<tresh ( random int <1) in this study we use 0,25

Then the system detect that it’s drowsy and save this image in the output

Els

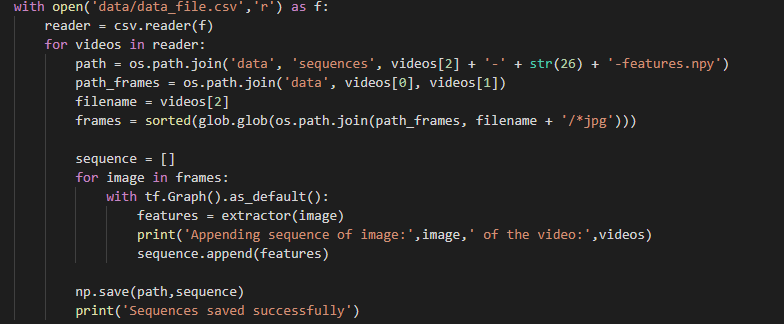
Save image in the folder name alert



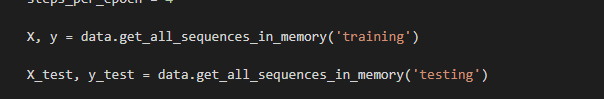
Seconde Part

we use the tensorflow Hub /image\_classifier to create graph model with the collected data set

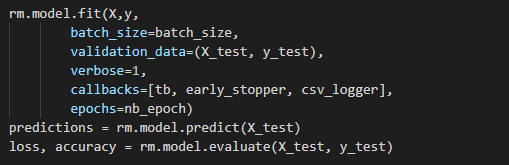
then w use this graph to extract feature from the training data from CNN module and save it as sequence of matrix to use it as Input from LTSM



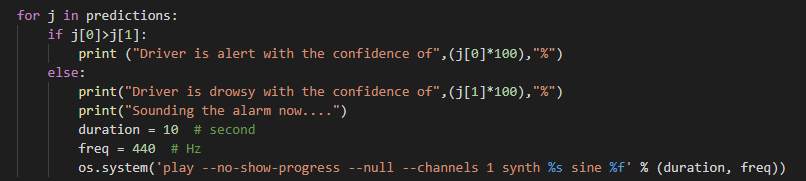
After this we run the train.py to get the final predictions for the test sequence of data and the alarm will sound if the model predicts the sequence to be in a drowsy state.



For training Data / Testing Data



We use the production vector to get if the driver drowsy or no and play alarm



The Parametre :

