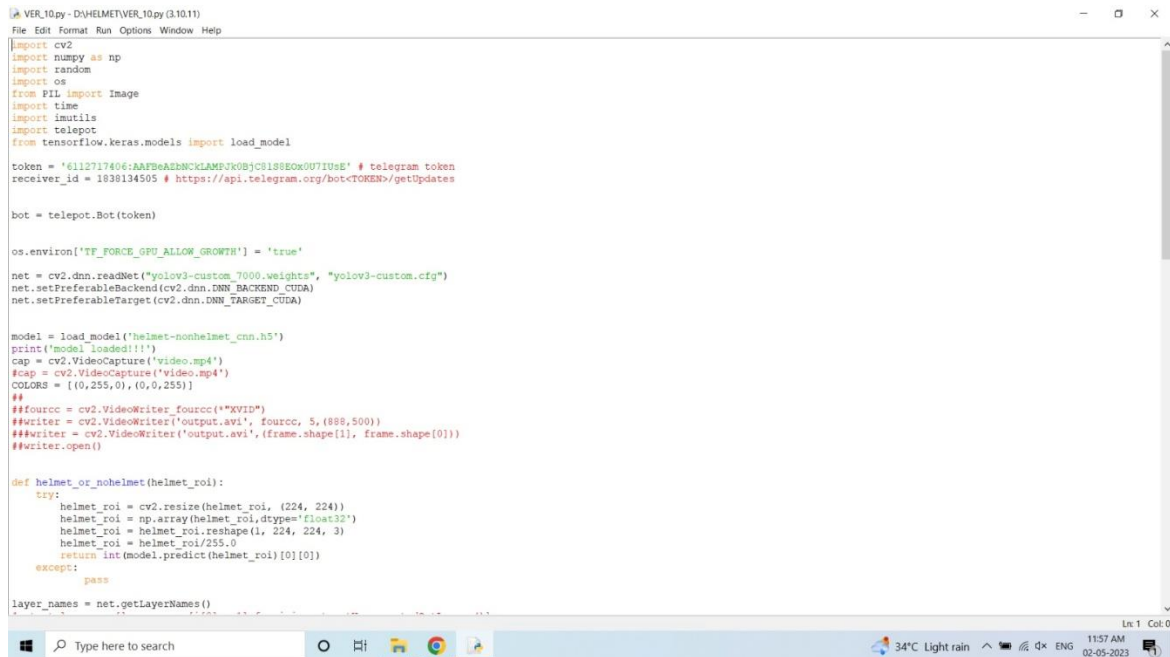


SCREENSHOTS

1. HELMET.py



```
VER_10.py - D:\HELMET\VER_10.py (3.10.11)
File Edit Format Run Options Window Help

import cv2
import numpy as np
import random
import os
from PIL import Image
import time
import imutils
import telepot
from tensorflow.keras.models import load_model

token = '6112717406:AAF8eA2NCKLAMPJK0BjCS188E0x0U7IU5E' # telegram token
receiver_id = 1838134505 # https://api.telegram.org/bot<TOKEN>/getUpdates

bot = telepot.Bot(token)

os.environ['TF_FORCE_GPU_ALLOW_GROWTH'] = 'true'

net = cv2.dnn.readNet("yolov3-custom_7000.weights", "yolov3-custom.cfg")
net.setPreferableBackend(cv2.dnn.DNN_BACKEND_CUDA)
net.setPreferableTarget(cv2.dnn.DNN_TARGET_CUDA)

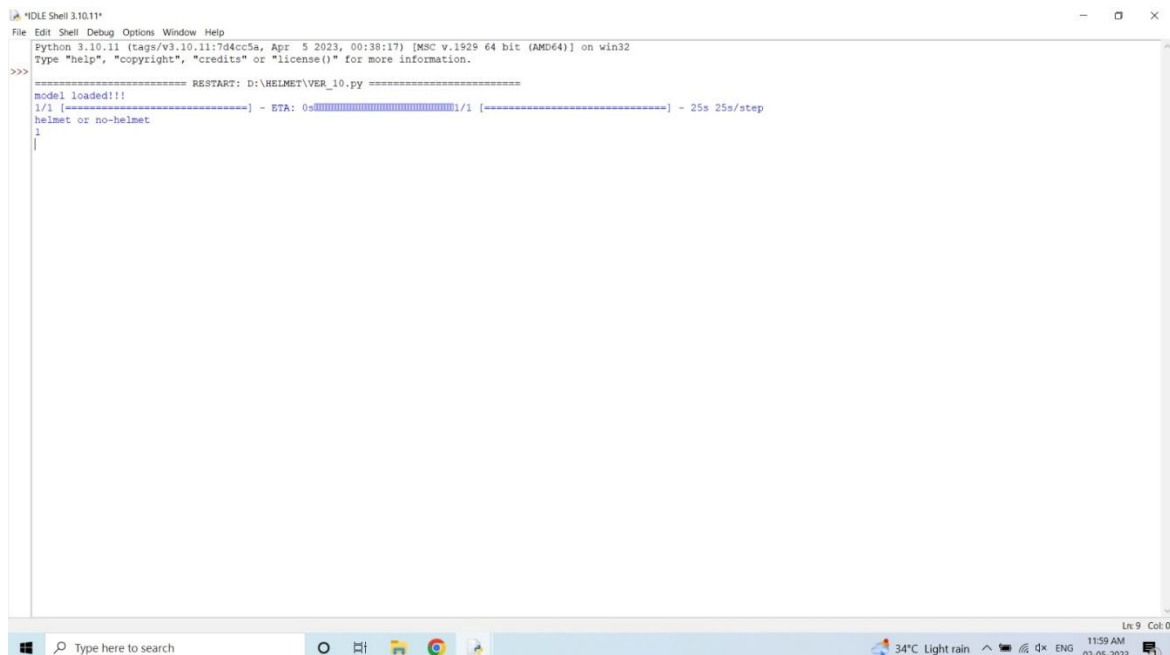
model = load_model("helmet-nonhelmet_cnn.h5")
print("model loaded!!!")
cap = cv2.VideoCapture("video.mp4")
#cap = cv2.VideoCapture("video.mp4")
COLORS = [(0,255,0), (0,0,255)]
##
##fourcc = cv2.VideoWriter_fourcc("XVID")
##writer = cv2.VideoWriter("output.avi", fourcc, 5, (888,500))
##writer = cv2.VideoWriter("output.avi", (frame.shape[1], frame.shape[0]))
##writer.open()

def helmet_or_nohelmet(helmet_roi):
    try:
        helmet_roi = cv2.resize(helmet_roi, (224, 224))
        helmet_roi = np.array(helmet_roi, dtype='float32')
        helmet_roi = helmet_roi.reshape(1, 224, 224, 3)
        helmet_roi = helmet_roi/255.0
        return int(model.predict(helmet_roi)[0][0])
    except:
        pass

layer_names = net.getLayerNames()

Ln 1 Col 0
```

2. INPUT LOAD



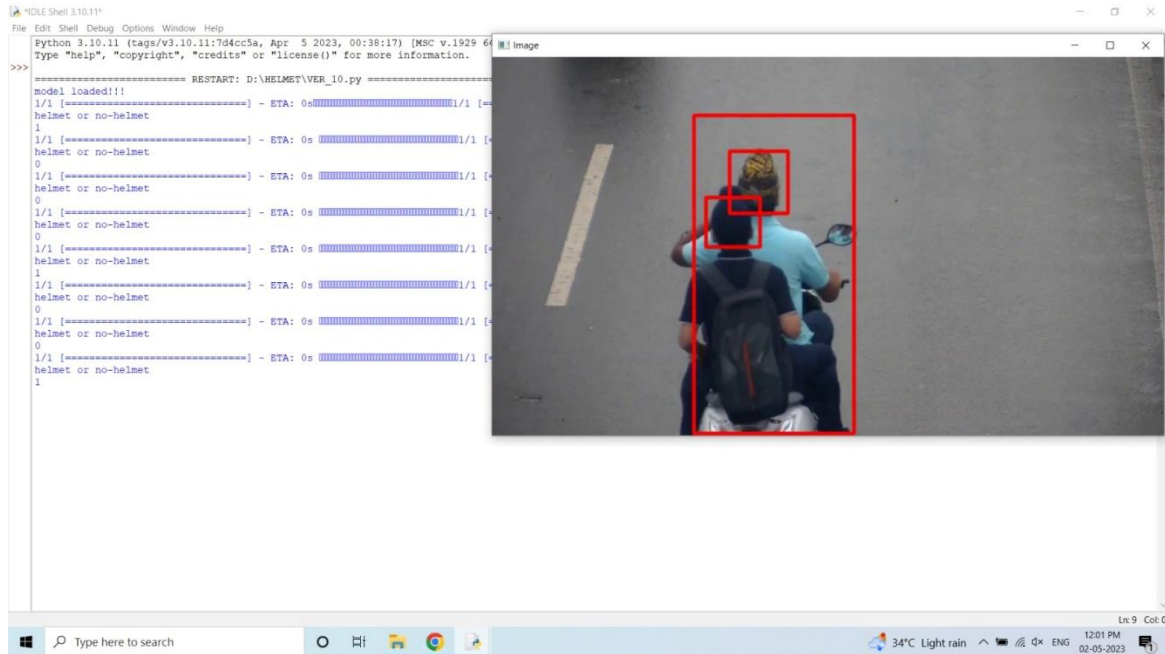
```
IDLE Shell 3.10.11*
File Edit Shell Debug Options Window Help

Python 3.10.11 (tags/v3.10.11:7d4cc5a, Apr 5 2023, 00:38:17) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

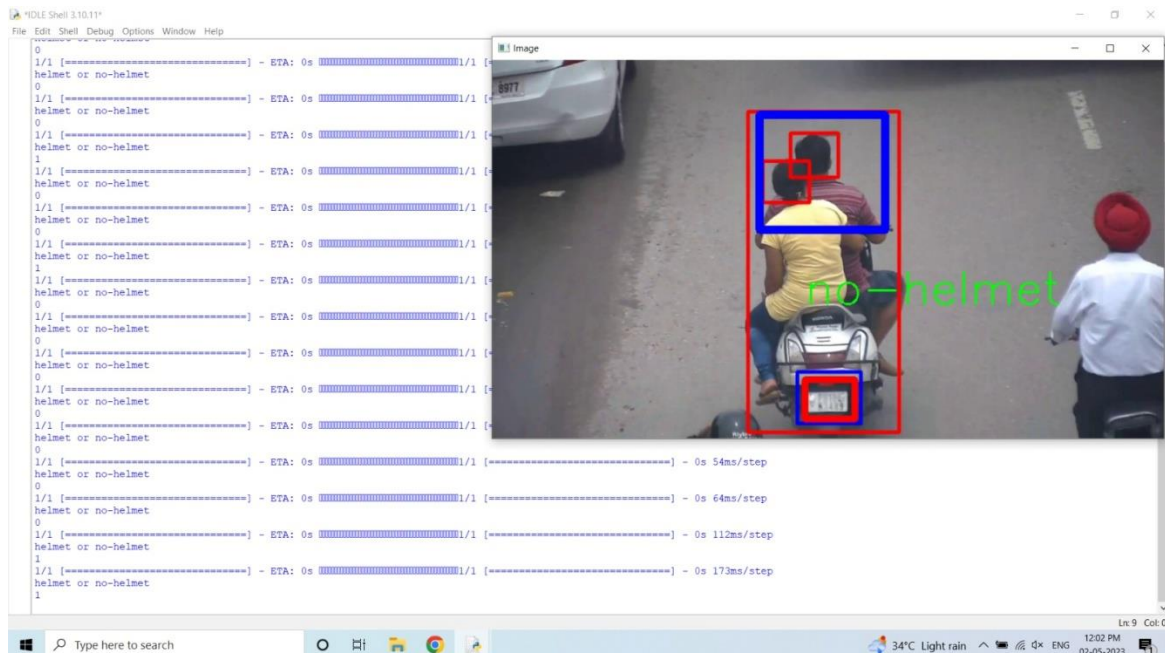
>>>
===== RESTART: D:\HELMET\VER_10.py =====
model loaded!!!
1/1 [=====] - ETA: 0s [=====] 1/1 [=====] - 25s 25s/step
helmet or no-helmet
1
1

Ln 9 Col 0
```

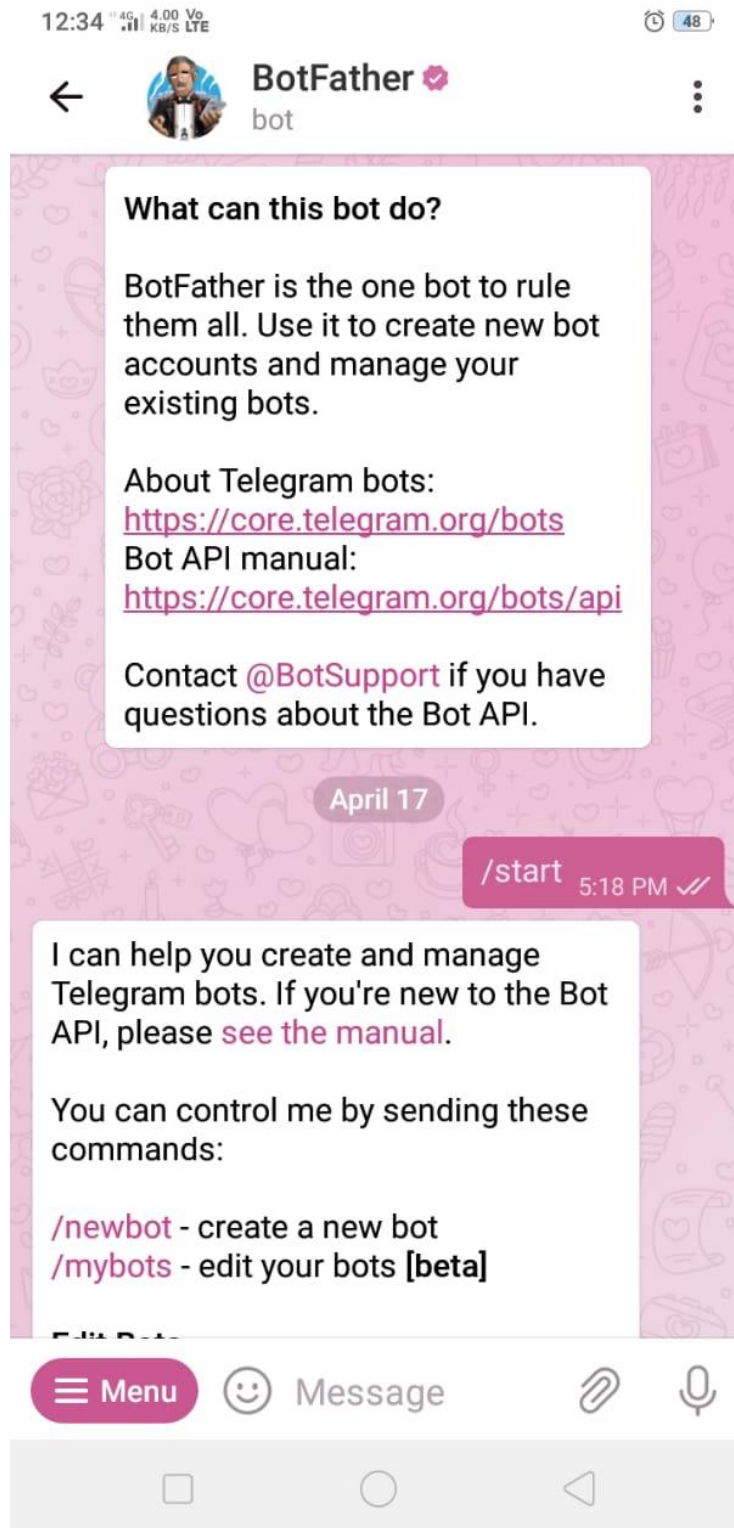
3. SEGMENTING INPUT



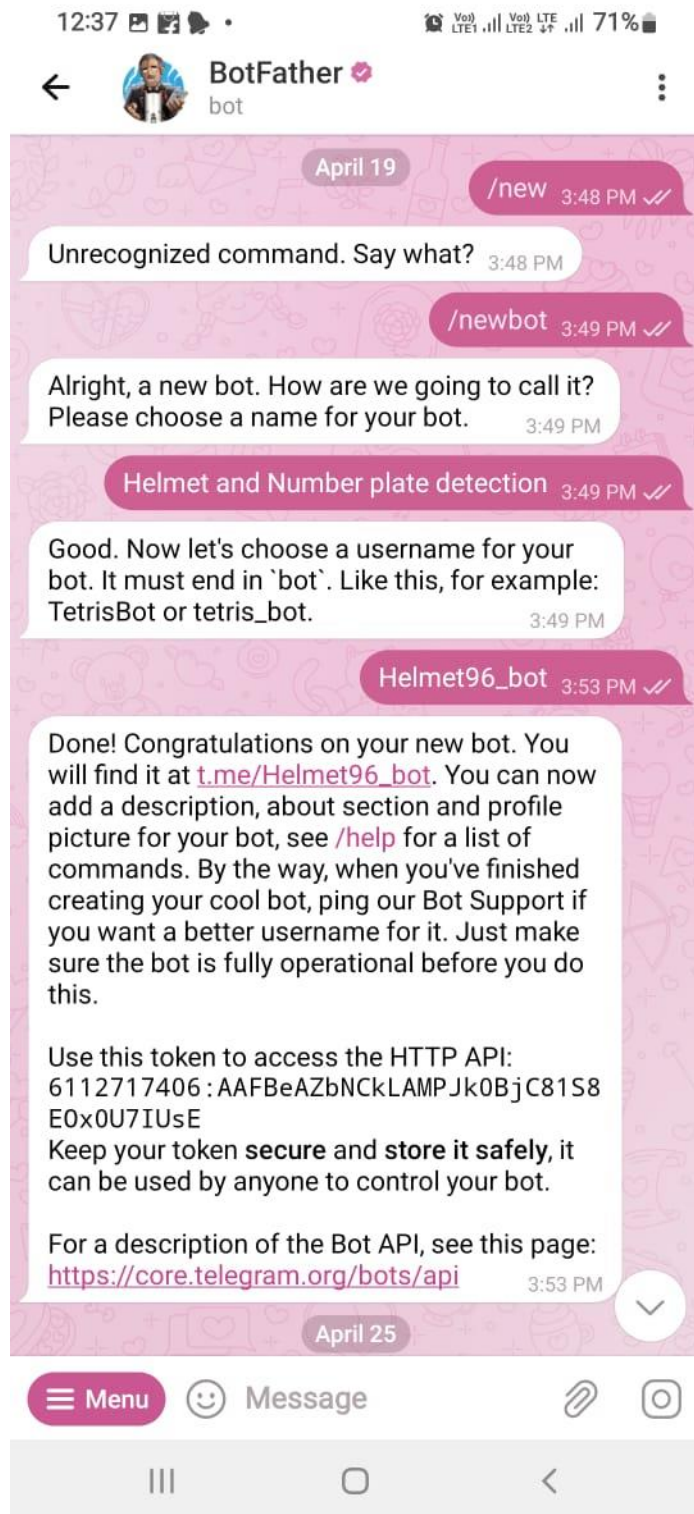
4. EXTRACTION



5. CREATING NEW BOT



6. ALERT BOT CREATE



7. ALERT NOTIFICATION

