```
print("Hello Hacktech")
     Hello Hacktech
!pip install ultralytics -q
                                                  618.1/618.1 kB 8.5 MB/s eta 0:00:00
from google.colab import drive
drive.mount('/content/drive')
     Mounted at /content/drive
!yolo detect predict model=yolov8m.pt source="/content/drive/MyDrive/timepass/1.webm"
     video 1/1 (510/564) /content/drive/MyDrive/timepass/1.webm: 384x640 17 cars, 1 truck, 968.1ms
     video 1/1 (511/564) /content/drive/MyDrive/timepass/1.webm: 384x640 17 cars, 1 truck, 1543.0ms
     video 1/1 (512/564) /content/drive/MyDrive/timepass/1.webm: 384x640 17 cars, 1 truck, 1651.7ms
     video 1/1 (513/564) /content/drive/MyDrive/timepass/1.webm: 384x640 16 cars, 1 truck, 1206.9ms
     video 1/1 (514/564) /content/drive/MyDrive/timepass/1.webm: 384x640 16 cars, 1 truck, 1 traffic light, 956.0ms
     video 1/1 (515/564) /content/drive/MyDrive/timepass/1.webm: 384x640 17 cars, 1 truck, 1 traffic light, 981.3ms
     video 1/1 (516/564) /content/drive/MyDrive/timepass/1.webm: 384x640 19 cars, 1 truck, 1 traffic light, 1009.7ms
     video 1/1 (517/564) /content/drive/MyDrive/timepass/1.webm: 384x640 19 cars, 1 truck, 1 traffic light, 968.7ms
     video 1/1 (518/564) /content/drive/MyDrive/timepass/1.webm: 384x640 16 cars, 1 truck, 1 traffic light, 965.1ms
     video 1/1 (519/564) /content/drive/MyDrive/timepass/1.webm: 384x640 16 cars, 1 truck, 1 traffic light, 945.9ms
     video 1/1 (520/564) /content/drive/MyDrive/timepass/1.webm: 384x640 16 cars, 1 truck, 969.9ms
     video 1/1 (521/564) /content/drive/MyDrive/timepass/1.webm: 384x640 16 cars, 1 truck, 980.2ms
     video 1/1 (522/564) /content/drive/MyDrive/timepass/1.webm: 384x640 18 cars, 1 truck, 977.4ms
     video 1/1 (523/564) /content/drive/MyDrive/timepass/1.webm: 384x640 18 cars, 1 truck, 1170.0ms
     \verb|video| 1/1 (524/564)| / content/drive/MyDrive/timepass/1.webm: 384x640 17 cars, 1 truck, 1584.3ms| \\
     video 1/1 (525/564) /content/drive/MyDrive/timepass/1.webm: 384x640 18 cars, 1 truck, 1550.8ms
     video 1/1 (526/564) /content/drive/MyDrive/timepass/1.webm: 384x640 18 cars, 1 truck, 1016.7ms
     video 1/1 (527/564) /content/drive/MyDrive/timepass/1.webm: 384x640 19 cars, 1 truck, 994.8ms
     video 1/1 (528/564) /content/drive/MyDrive/timepass/1.webm: 384x640 19 cars, 1 truck, 987.7ms
     video 1/1 (529/564) /content/drive/MyDrive/timepass/1.webm: 384x640 20 cars, 1 truck, 1034.8ms
     video 1/1 (530/564) /content/drive/MyDrive/timepass/1.webm: 384x640 19 cars, 1 truck, 1 traffic light, 940.8ms
     video 1/1 (531/564) /content/drive/MyDrive/timepass/1.webm: 384x640 21 cars, 1 truck, 1 traffic light, 942.1ms
     video 1/1 (532/564) /content/drive/MyDrive/timepass/1.webm: 384x640 20 cars, 1 truck, 982.9ms
     video 1/1 (533/564) /content/drive/MyDrive/timepass/1.webm: 384x640 22 cars, 1 truck, 1 traffic light, 985.1ms
    video 1/1 (534/564) /content/drive/MyDrive/timepass/1.webm: 384x640 21 cars, 1 truck, 999.7ms
     video 1/1 (535/564) /content/drive/MyDrive/timepass/1.webm: 384x640 20 cars, 1 truck, 1 traffic light, 978.9ms
     video 1/1 (536/564) /content/drive/MyDrive/timepass/1.webm: 384x640 19 cars, 1 truck, 1 traffic light, 1443.3ms
     video 1/1 (537/564) /content/drive/MyDrive/timepass/1.webm: 384x640 20 cars, 1 truck, 1 traffic light, 1647.2ms
     video 1/1 (538/564) /content/drive/MyDrive/timepass/1.webm: 384x640 20 cars, 1 truck, 1 traffic light, 1413.7ms
     video 1/1 (539/564) /content/drive/MyDrive/timepass/1.webm: 384x640 19 cars, 1 truck, 1 traffic light, 958.3ms
     video 1/1 (540/564) /content/drive/MyDrive/timepass/1.webm: 384x640 21 cars, 1 truck, 1 traffic light, 965.5ms
     video 1/1 (541/564) /content/drive/MyDrive/timepass/1.webm: 384x640 20 cars, 1 truck, 1 traffic light, 982.9ms
     video 1/1 (542/564) /content/drive/MyDrive/timepass/1.webm: 384x640 20 cars, 1 truck, 970.3ms
     video 1/1 (543/564) /content/drive/MyDrive/timepass/1.webm: 384x640 16 cars, 1 truck, 947.5ms
     video 1/1 (544/564) /content/drive/MyDrive/timepass/1.webm: 384x640 16 cars, 1 truck, 936.9ms
     video 1/1 (545/564) /content/drive/MyDrive/timepass/1.webm: 384x640 18 cars, 1 truck, 947.5ms
     \verb|video| 1/1 (546/564)| / content/drive/MyDrive/timepass/1.webm: 384x640 18 cars, 1 truck, 953.7ms| \\
     video 1/1 (547/564) /content/drive/MyDrive/timepass/1.webm: 384x640 18 cars, 1 truck, 960.8ms
     video 1/1 (548/564) /content/drive/MyDrive/timepass/1.webm: 384x640 1 person, 19 cars, 1 truck, 983.6ms
     video 1/1 (549/564) /content/drive/MyDrive/timepass/1.webm: 384x640 20 cars, 1 truck, 1588.7ms
     video 1/1 (550/564) /content/drive/MyDrive/timepass/1.webm: 384x640 20 cars, 1 truck, 1567.7ms
     video 1/1 (551/564) /content/drive/MyDrive/timepass/1.webm: 384x640 20 cars, 1 truck, 1271.4ms
     video 1/1 (552/564) /content/drive/MyDrive/timepass/1.webm: 384x640 21 cars, 1 truck, 972.5ms
     video 1/1 (553/564) /content/drive/MyDrive/timepass/1.webm: 384x640 21 cars, 1 truck, 936.8ms
     video 1/1 (554/564) /content/drive/MyDrive/timepass/1.webm: 384x640 21 cars, 1 truck, 993.9ms
     video 1/1 (555/564) /content/drive/MvDrive/timepass/1.webm: 384x640 20 cars, 1 truck, 1010.5ms
     video 1/1 (556/564) /content/drive/MyDrive/timepass/1.webm: 384x640 20 cars, 1 truck, 962.1ms
     video 1/1 (557/564) /content/drive/MyDrive/timepass/1.webm: 384x640 20 cars, 1 truck, 944.8ms
     video 1/1 (558/564) /content/drive/MyDrive/timepass/1.webm: 384x640 20 cars, 1 truck, 969.5ms
     video 1/1 (559/564) /content/drive/MyDrive/timepass/1.webm: 384x640 20 cars, 1 truck, 963.1ms
     video 1/1 (560/564) /content/drive/MyDrive/timepass/1.webm: 384x640 19 cars, 1 truck, 932.7ms
     video 1/1 (561/564) /content/drive/MyDrive/timepass/1.webm: 384x640 22 cars, 1 truck, 1126.4ms
     video 1/1 (562/564) /content/drive/MyDrive/timepass/1.webm: 384x640 22 cars, 1632.3ms
     video 1/1 (563/564) /content/drive/MyDrive/timepass/1.webm: 384x640 22 cars, 1642.0ms
     video 1/1 (564/564) /content/drive/MyDrive/timepass/1.webm: 384x640 21 cars, 1 truck, 1026.7ms
     Speed: 3.1ms preprocess, 1105.3ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)
     Results saved to runs/detect/predict
      P Learn more at https://docs.ultralytics.com/modes/predict
!ffmpeg -i {"/content/runs/detect/predict/1.avi"} -vcodec libx264 {"final1.avi"}
     ffmpeg version 4.4.2-0ubuntu0.22.04.1 Copyright (c) 2000-2021 the FFmpeg developers
       built with gcc 11 (Ubuntu 11.2.0-19ubuntu1)
       configuration: --prefix=/usr --extra-version=0ubuntu0.22.04.1 --toolchain=hardened --libdir=/usr/lib/x86_64-linux-gnu --incdir=/u
       libavutil
                      56. 70.100 / 56. 70.100
                      58.134.100 / 58.134.100
       libavcodec
       libavformat
                      58. 76.100 / 58. 76.100
       libavdevice
                      58. 13.100 / 58. 13.100
```

```
libavfilter
                 7.110.100 / 7.110.100
              5. 9.100 / 5. 9.100
 libswscale
 libswresample 3. 9.100 / 3. 9.100 libpostproc 55. 9.100 / 55. 9.100
Input #0, avi, from '/content/runs/detect/predict/1.avi':
 Metadata:
   software
                   : Lavf59.27.100
 Duration: 00:00:22.56, start: 0.000000, bitrate: 10552 kb/s
 Stream #0:0: Video: mjpeg (Baseline) (MJPG / 0x47504A4D), yuvj420p(pc, bt470bg/unknown/unknown), 596x336, 10564 kb/s, 25 fps, 25
Stream mapping:
 Stream #0:0 -> #0:0 (mjpeg (native) -> h264 (libx264))
Press [q] to stop, [?] for help
[libx264 @ 0x5ce9f6ac6300] using cpu capabilities: MMX2 SSE2Fast SSSE3 SSE4.2 AVX FMA3 BMI2 AVX2
[libx264 @ 0x5ce9f6ac6300] profile High, level 2.2, 4:2:0, 8-bit
Output #0, avi, to 'final1.avi':
 Metadata:
   software
                   : Lavf59.27.100
   ISFT
                   : Lavf58.76.100
 Stream #0:0: Video: h264 (H264 / 0x34363248), yuvj420p(pc, bt470bg/unknown/unknown, progressive), 596x336, q=2-31, 25 fps, 25
   Metadata:
     encoder
                     : Lavc58.134.100 libx264
   Side data:
     cpb: bitrate max/min/avg: 0/0/0 buffer size: 0 vbv_delay: N/A
frame= 564 fps= 48 q=-1.0 Lsize= 3041kB time=00:00:22.48 bitrate=1108.2kbits/s speed= 1.9x
video:3022kB audio:0kB subtitle:0kB other streams:0kB global headers:0kB muxing overhead: 0.630159%
[libx264 @ 0x5ce9f6ac6300] frame I:3 Avg QP:21.39 size: 43395
[libx264 @ 0x5ce9f6ac6300] frame P:142 Avg QP:23.80 size: 13380 [libx264 @ 0x5ce9f6ac6300] frame B:419 Avg QP:30.54 size: 2540
[libx264 @ 0x5ce9f6ac6300] consecutive B-frames: 0.7% 0.4% 1.1% 97.9%
[libx264 @ 0x5ce9f6ac6300] mb I I16..4: 0.4% 83.3% 16.3%
[libx264 @ 0x5ce9f6ac6300] mb P I16..4: 0.4% 4.8% 2.2% P16..4: 28.8% 21.5% 21.0% 0.0% 0.0%
                                                                                                      skin:21.3%
[libx264 @ 0x5ce9f6ac6300] mb B I16..4: 0.1% 0.1% 0.3% B16..8: 24.8% 11.1% 5.1% direct: 3.0% skip:55.6% L0:41.3% L1:43.4%
[libx264 @ 0x5ce9f6ac6300] 8x8 transform intra:62.9% inter:53.4%
[libx264 @ 0x5ce9f6ac6300] coded y,uvDC,uvAC intra: 85.8% 94.1% 62.7% inter: 16.0% 23.6% 14.9%
[libx264 @ 0x5ce9f6ac6300] i16 v,h,dc,p: 23% 43% 6% 28%
[libx264 @ 0x5ce9f6ac6300] i8 v,h,dc,ddl,ddr,vr,hd,vl,hu: 22% 20% 22% 3% 9% 8% 6% 6% 5%
[libx264 @ 0x5ce9f6ac6300] i4 v,h,dc,ddl,ddr,vr,hd,vl,hu: 22% 30% 14% 5% 6% 5% 7% 7% 5%
[libx264 @ 0x5ce9f6ac6300] i8c dc,h,v,p: 35% 34% 24% 8%
[libx264 @ 0x5ce9f6ac6300] Weighted P-Frames: Y:1.4% UV:0.0%
[libx264 @ 0x5ce9f6ac6300] ref P L0: 56.6% 16.6% 18.0% 8.7% 0.1%
[libx264 @ 0x5ce9f6ac6300] ref B L0: 86.1% 10.9% 2.9%
[libx264 @ 0x5ce9f6ac6300] ref B L1: 94.0% 6.0%
[libx264 @ 0x5ce9f6ac6300] kb/s:1097.33
```

 $!yolo\ detect\ predict\ model=yolov8m.pt\ source="\underline{/content/drive/MyDrive/timepass/2.webm"}$ 

```
Assignment1phase2 - Colaboratory
           عام عندر روان المراجع ا
video 1/1 (293/303) /content/drive/MyDrive/timepass/2.webm: 384x640 17 cars, 1 truck, 2 traffic lights, 1526.0ms
video 1/1 (294/303) /content/drive/MyDrive/timepass/2.webm: 384x640 17 cars, 1 traffic light, 1518.5ms
video 1/1 (295/303) /content/drive/MyDrive/timepass/2.webm: 384x640 13 cars, 1 traffic light, 1652.2ms
video 1/1 (296/303) /content/drive/MyDrive/timepass/2.webm: 384x640 13 cars, 1 bus, 1 traffic light, 1103.7ms
video 1/1 (297/303) /content/drive/MyDrive/timepass/2.webm: 384x640 15 cars, 1 traffic light, 1005.0ms
video 1/1 (298/303) /content/drive/MyDrive/timepass/2.webm: 384x640 15 cars, 1 bus, 2 traffic lights, 1062.3ms
video 1/1 (299/303) /content/drive/MyDrive/timepass/2.webm: 384x640 14 cars, 2 traffic lights, 999.7ms
video 1/1 (300/303) /content/drive/MyDrive/timepass/2.webm: 384x640 14 cars, 1 truck, 1 traffic light, 994.5ms
video 1/1 (301/303) /content/drive/MyDrive/timepass/2.webm: 384x640 15 cars, 1 bus, 1 traffic light, 963.8ms
video 1/1 (302/303) /content/drive/MyDrive/timepass/2.webm: 384x640 15 cars, 1 traffic light, 981.7ms
video 1/1 (303/303) /content/drive/MyDrive/timepass/2.webm: 384x640 14 cars, 1 traffic light, 957.2ms
Speed: 3.5ms preprocess, 1137.1ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)
Results saved to runs/detect/predict2
```

```
!ffmpeg -i {"/content/runs/detect/predict2/2.avi"} -vcodec libx264 {"final2.avi"}
ffmpeg version 4.4.2-0ubuntu0.22.04.1 Copyright (c) 2000-2021 the FFmpeg developers
      built with gcc 11 (Ubuntu 11.2.0-19ubuntu1)
      configuration: --prefix=/usr --extra-version=0ubuntu0.22.04.1 --toolchain=hardened --libdir=/usr/lib/x86_64-linux-gnu --incdir=/u
                    56. 70.100 / 56. 70.100
      libavutil
                    58.134.100 / 58.134.100
      libavcodec
                    58. 76.100 / 58. 76.100
      libayformat
      libavdevice
                    58. 13.100 / 58. 13.100
      libavfilter
                     7.110.100 / 7.110.100
                     5. 9.100 / 5. 9.100
      libswscale
      libswresample 3. 9.100 / 3. 9.100
      libpostproc 55. 9.100 / 55. 9.100
    Input #0, avi, from '/content/runs/detect/predict2/2.avi':
      Metadata:
                       : Lavf59.27.100
        software
      Duration: 00:00:12.12, start: 0.000000, bitrate: 7626 kb/s
      Stream #0:0: Video: mjpeg (Baseline) (MJPG / 0x47504A4D), yuvj420p(pc, bt470bg/unknown/unknown), 596x336, 7643 kb/s, 25 fps, 25 t
    Stream mapping:
      Stream #0:0 -> #0:0 (mjpeg (native) -> h264 (libx264))
    Press [q] to stop, [?] for help
    [libx264 @ 0x5cfe1605d940] using cpu capabilities: MMX2 SSE2Fast SSSE3 SSE4.2 AVX FMA3 BMI2 AVX2
    [libx264 @ 0x5cfe1605d940] profile High, level 2.2, 4:2:0, 8-bit
    Output #0, avi, to 'final2.avi':
      Metadata:
        software
                       : Lavf59.27.100
                       : Lavf58.76.100
        ISFT
      Stream #0:0: Video: h264 (H264 / 0x34363248), yuvj420p(pc, bt470bg/unknown/unknown, progressive), 596x336, q=2-31, 25 fps, 25 tbn
        Metadata:
          encoder
                         : Lavc58.134.100 libx264
        Side data:
          cpb: bitrate max/min/avg: 0/0/0 buffer size: 0 vbv_delay: N/A
    frame= 303 fps= 46 q=-1.0 Lsize= 1445kB time=00:00:12.04 bitrate= 982.9kbits/s speed=1.82x
    video:1432kB audio:0kB subtitle:0kB other streams:0kB global headers:0kB muxing overhead: 0.893512%
    [libx264 @ 0x5cfe1605d940] frame I:2 Avg QP:23.78 size: 26924
     [libx264 @ 0x5cfe1605d940] frame P:76
                                           Avg QP:23.56 size: 8355
    [libx264 @ 0x5cfe1605d940] frame B:225 Avg QP:29.18 size: 3455
     [libx264 @ 0x5cfe1605d940] consecutive B-frames: 0.7% 0.0% 3.0% 96.4%
    [libx264 @ 0x5cfe1605d940] mb I I16..4: 1.5% 78.3% 20.2%
     [libx264 @ 0x5cfe1605d940] mb P I16..4: 0.6% 6.4% 6.5% P16..4: 31.0% 11.8% 11.1% 0.0% 0.0%
                                                                                                     skin:32.6%
     [libx264 @ 0x5cfe1605d940] mb B I16..4: 0.2% 0.9% 2.4% B16..8: 22.7% 6.9% 3.6% direct: 1.5% skip:61.8% L0:46.7% L1:45.1%
     [libx264 @ 0x5cfe1605d940] 8x8 transform intra:41.7% inter:59.5%
     [libx264 @ 0x5cfe1605d940] coded y,uvDC,uvAC intra: 84.6% 84.6% 61.4% inter: 12.0% 14.8% 10.3%
     [libx264 @ 0x5cfe1605d940] i16 v,h,dc,p: 15% 62% 8% 15%
     [libx264 @ 0x5cfe1605d940] i8 v,h,dc,ddl,ddr,vr,hd,vl,hu: 19% 29% 18% 4% 6% 4% 7% 5% 8%
    [libx264 @ 0x5cfe1605d940] i4 v,h,dc,ddl,ddr,vr,hd,vl,hu: 23% 33% 11% 5% 6% 5% 6% 5% 6%
    [libx264 @ 0x5cfe1605d940] i8c dc,h,v,p: 28% 46% 22% 4%
    [libx264 @ 0x5cfe1605d940] Weighted P-Frames: Y:6.6% UV:1.3%
     [libx264 @ 0x5cfe1605d940] ref P L0: 44.0% 16.3% 23.9% 14.7% 1.0%
    [libx264 @ 0x5cfe1605d940] ref B L0: 76.6% 16.7% 6.7%
     [libx264 @ 0x5cfe1605d940] ref B L1: 89.1% 10.9%
    [libx264 @ 0x5cfe1605d940] kb/s:967.81
!yolo detect predict model=yolov8m.pt source="/content/drive/MyDrive/timepass/3.webm"
    YOLOv8m summary (fused): 218 layers, 25886080 parameters, 0 gradients
    video 1/1 (1/488) /content/drive/MyDrive/timepass/3.webm: 384x640 17 cars, 1 traffic light, 1065.2ms
    video 1/1 (2/488) /content/drive/MyDrive/timepass/3.webm: 384x640 9 cars, 1 airplane, 1 truck, 1 traffic light, 957.4ms
    video 1/1 (3/488) /content/drive/MyDrive/timepass/3.webm: 384x640 10 cars, 1 traffic light, 971.9ms
```

```
video 1/1 (4/488) /content/drive/MyDrive/timepass/3.webm: 384x640 12 cars, 3 traffic lights, 989.1ms
video 1/1 (5/488) /content/drive/MyDrive/timepass/3.webm: 384x640 10 cars, 1 traffic light, 1018.3ms
video 1/1 (6/488) /content/drive/MyDrive/timepass/3.webm: 384x640 12 cars, 1 traffic light, 953.3ms
\verb|video| 1/1| (7/488) / content/drive/MyDrive/timepass/3. webm: 384x640 15 cars, 1 truck, 1077.8 ms | 1/2 cars, 1 truck, 1077.8 ms | 1/2 cars, 1
video 1/1 (8/488) /content/drive/MyDrive/timepass/3.webm: 384x640 13 cars, 1 traffic light, 1571.5ms
video 1/1 (9/488) /content/drive/MyDrive/timepass/3.webm: 384x640 11 cars, 1 traffic light, 1614.1ms
video 1/1 (10/488) /content/drive/MyDrive/timepass/3.webm: 384x640 9 cars, 2 traffic lights, 1135.1ms
video 1/1 (11/488) /content/drive/MyDrive/timepass/3.webm: 384x640 12 cars, 1 traffic light, 975.5ms
video 1/1 (12/488) /content/drive/MyDrive/timepass/3.webm: 384x640 11 cars, 1 traffic light, 963.2ms
```

video 1/1 (13/488) /content/drive/MyDrive/timepass/3.webm: 384x640 12 cars, 1 bus, 1 traffic light, 971.5ms

```
video 1/1 (14/488) /content/drive/MyDrive/timepass/3.webm: 384x640 10 cars, 1 truck, 1 traffic light, 903.0ms
    video 1/1 (15/488) /content/drive/MyDrive/timepass/3.webm: 384x640 11 cars, 1 truck, 2 traffic lights, 920.6ms
    video 1/1 (16/488) /content/drive/MyDrive/timepass/3.webm: 384x640 9 cars, 1 bus, 1 traffic light, 929.8ms
    video 1/1 (17/488) /content/drive/MyDrive/timepass/3.webm: 384x640 9 cars, 1 bus, 1 traffic light, 1002.3ms
    video 1/1 (18/488) /content/drive/MyDrive/timepass/3.webm: 384x640 6 cars, 1 bus, 938.2ms
    video 1/1 (19/488) /content/drive/MyDrive/timepass/3.webm: 384x640 9 cars, 1 bus, 1 traffic light, 943.0ms
    video 1/1 (20/488) /content/drive/MyDrive/timepass/3.webm: 384x640 11 cars, 1 bus, 1 traffic light, 1206.0ms
    video 1/1 (21/488) /content/drive/MyDrive/timepass/3.webm: 384x640 14 cars, 1 bus, 1 traffic light, 1581.8ms
    video 1/1 (22/488) /content/drive/MyDrive/timepass/3.webm: 384x640 13 cars, 1 traffic light, 1530.4ms
     video 1/1 (23/488) /content/drive/MyDrive/timepass/3.webm: 384x640 12 cars, 1 traffic light, 1057.4ms
     video 1/1 (24/488) /content/drive/MyDrive/timepass/3.webm: 384x640 14 cars, 1 traffic light, 968.8ms
     video 1/1 (25/488) /content/drive/MyDrive/timepass/3.webm: 384x640 15 cars, 2 traffic lights, 997.5ms
    video 1/1 (26/488) /content/drive/MyDrive/timepass/3.webm: 384x640 9 cars, 963.9ms
    video 1/1 (27/488) /content/drive/MyDrive/timepass/3.webm: 384x640 14 cars, 1 traffic light, 968.0ms
    video 1/1 (28/488) /content/drive/MyDrive/timepass/3.webm: 384x640 11 cars, 1 traffic light, 943.8ms
    video 1/1 (29/488) /content/drive/MyDrive/timepass/3.webm: 384x640 12 cars, 942.6ms
    video 1/1 (30/488) /content/drive/MyDrive/timepass/3.webm: 384x640 12 cars, 1 traffic light, 960.5ms
    video 1/1 (31/488) /content/drive/MyDrive/timepass/3.webm: 384x640 17 cars, 1 traffic light, 1011.4ms
    video 1/1 (32/488) /content/drive/MyDrive/timepass/3.webm: 384x640 16 cars, 1 traffic light, 916.0ms
    video 1/1 (33/488) /content/drive/MyDrive/timepass/3.webm: 384x640 16 cars, 1 traffic light, 1279.3ms
    video 1/1 (34/488) /content/drive/MyDrive/timepass/3.webm: 384x640 21 cars, 1584.2ms
    video 1/1 (35/488) /content/drive/MyDrive/timepass/3.webm: 384x640 18 cars, 1 traffic light, 1533.3ms
    video 1/1 (36/488) /content/drive/MyDrive/timepass/3.webm: 384x640 16 cars, 1 traffic light, 955.0ms
    video 1/1 (37/488) /content/drive/MyDrive/timepass/3.webm: 384x640 12 cars, 942.0ms
    video 1/1 (38/488) /content/drive/MyDrive/timepass/3.webm: 384x640 1 person, 13 cars, 1 truck, 956.7ms
    video 1/1 (39/488) /content/drive/MyDrive/timepass/3.webm: 384x640 13 cars, 1 traffic light, 1000.9ms
    \verb|video| 1/1 (40/488) / content/drive/MyDrive/timepass/3.webm: 384x640 16 cars, 1 traffic light, 990.4ms| \\
    video 1/1 (41/488) /content/drive/MyDrive/timepass/3.webm: 384x640 13 cars, 1 traffic light, 988.1ms
    video 1/1 (42/488) /content/drive/MyDrive/timepass/3.webm: 384x640 13 cars, 1 traffic light, 937.3ms
    video 1/1 (43/488) /content/drive/MyDrive/timepass/3.webm: 384x640 12 cars, 2 trucks, 1 traffic light, 910.1ms
    video 1/1 (44/488) /content/drive/MyDrive/timepass/3.webm: 384x640 11 cars, 1 traffic light, 928.3ms
    video 1/1 (45/488) /content/drive/MyDrive/timepass/3.webm: 384x640 11 cars, 930.8ms
    video 1/1 (46/488) /content/drive/MyDrive/timepass/3.webm: 384x640 11 cars, 1462.4ms
    video 1/1 (47/488) /content/drive/MyDrive/timepass/3.webm: 384x640 13 cars, 1619.3ms
    video 1/1 (48/488) /content/drive/MyDrive/timepass/3.webm: 384x640 12 cars, 1 traffic light, 1375.6ms
    video 1/1 (49/488) /content/drive/MyDrive/timepass/3.webm: 384x640 10 cars, 1 truck, 1 traffic light, 1001.4ms
    video 1/1 (50/488) /content/drive/MyDrive/timepass/3.webm: 384x640 15 cars, 1 traffic light, 985.7ms
    video 1/1 (51/488) /content/drive/MyDrive/timepass/3.webm: 384x640 8 cars, 1 traffic light, 977.4ms
    video 1/1 (52/488) /content/drive/MyDrive/timepass/3.webm: 384x640 11 cars, 1 truck, 966.4ms
    video 1/1 (53/488) /content/drive/MyDrive/timepass/3.webm: 384x640 9 cars, 957.8ms
    video 1/1 (54/488) /content/drive/MyDrive/timepass/3.webm: 384x640 13 cars, 978.5ms
                       /contant/dnivo/MyDnivo/timonacc/2 wahm. 204v640 10 cans
!ffmpeg -i {"/content/runs/detect/predict3/3.avi"} -vcodec libx264 {"final3.avi"}
    ffmpeg version 4.4.2-0ubuntu0.22.04.1 Copyright (c) 2000-2021 the FFmpeg developers
      built with gcc 11 (Ubuntu 11.2.0-19ubuntu1)
      configuration: --prefix=/usr --extra-version=0ubuntu0.22.04.1 --toolchain=hardened --libdir=/usr/lib/x86_64-linux-gnu --incdir=/u
                     56. 70.100 / 56. 70.100
      libavutil
                     58.134.100 / 58.134.100
      libavcodec
                     58. 76.100 / 58. 76.100
      libavformat
      libavdevice
                     58. 13.100 / 58. 13.100
                      7.110.100 / 7.110.100
      libayfilter
      libswscale
                      5. 9.100 / 5. 9.100
      libswresample 3. 9.100 / 3. 9.100
                    55. 9.100 / 55. 9.100
      libpostproc
    Input #0, avi, from '/content/runs/detect/predict3/3.avi':
      Metadata:
                        : Lavf59.27.100
        software
      Duration: 00:00:08.41, start: 0.000000, bitrate: 10347 kb/s
      Stream #0:0: Video: mjpeg (Baseline) (MJPG / 0x47504A4D), yuvj420p(pc, bt470bg/unknown/unknown), 596x336, 10379 kb/s, 29 fps, 29
    Stream mapping:
      Stream #0:0 -> #0:0 (mjpeg (native) -> h264 (libx264))
    Press [q] to stop, [?] for help
     [libx264 @ 0x57b7997c2680] using cpu capabilities: MMX2 SSE2Fast SSSE3 SSE4.2 AVX FMA3 BMI2 AVX2
     [libx264 @ 0x57b7997c2680] profile High, level 3.0, 4:2:0, 8-bit
    Output #0, avi, to 'final3.avi':
      Metadata:
        software
                        : Lavf59.27.100
        ISFT
                        : Lavf58.76.100
      Stream #0:0: Video: h264 (H264 / 0x34363248), yuvj420p(pc, bt470bg/unknown/unknown, progressive), 596x336, q=2-31, 29 fps, 29 tbn
        Metadata:
                          : Lavc58.134.100 libx264
          encoder
        Side data:
          cpb: bitrate max/min/avg: 0/0/0 buffer size: 0 vbv_delay: N/A
    frame= 244 fps= 35 q=-1.0 Lsize= 2658kB time=00:00:08.34 bitrate=2609.2kbits/s speed=1.19x
     video:2646kB audio:0kB subtitle:0kB other streams:0kB global headers:0kB muxing overhead: 0.430187%
     [libx264 @ 0x57b7997c2680] frame I:3
                                            Avg QP:26.47 size: 27142
     [libx264 @ 0x57b7997c2680] frame P:68
                                             Avg QP:27.65 size: 13271
     [libx264 @ 0x57b7997c2680] frame B:173 Avg QP:29.37 size: 9978
     [libx264 @ 0x57b7997c2680] consecutive B-frames: 3.7% 4.1% 3.7% 88.5%
     [libx264 @ 0x57b7997c2680] mb I I16..4: 4.8% 63.1% 32.2%
     [libx264 @ 0x57b7997c2680] mb P I16..4: 6.9% 23.6% 17.9% P16..4: 23.8% 12.4% 8.2% 0.0% 0.0%
                                                                                                         skin: 7.3%
     [libx264 @ 0x57b7997c2680] mb B I16..4: 5.6% 13.9% 13.4% B16..8: 21.6% 11.9% 5.9% direct: 6.9% skip:20.9% L0:51.5% L1:40.7%
     [libx264 @ 0x57b7997c2680] 8x8 transform intra:45.2% inter:54.9%
     [libx264 @ 0x57b7997c2680] coded y,uvDC,uvAC intra: 69.4% 78.7% 38.5% inter: 39.2% 36.3% 15.3%
     [libx264 @ 0x57b7997c2680] i16 v,h,dc,p: 21% 37% 15% 27%
     [libx264 @ 0x57b7997c2680] i8 v,h,dc,ddl,ddr,vr,hd,vl,hu: 20% 30% 25% 6% 3% 2% 3% 4% 7%
     [libx264 @ 0x57b7997c2680] i4 v,h,dc,ddl,ddr,vr,hd,vl,hu: 26% 28% 13% 8% 4% 4% 5% 6% 6%
```

```
[libx264 @ 0x57b7997c2680] i8c dc,h,v,p: 37% 36% 22% 5%

[libx264 @ 0x57b7997c2680] Weighted P-Frames: Y:2.9% UV:2.9%

[libx264 @ 0x57b7997c2680] ref P L0: 34.9% 12.1% 29.4% 23.0% 0.5%

[libx264 @ 0x57b7997c2680] ref B L0: 64.4% 25.3% 10.3%

[libx264 @ 0x57b7997c2680] ref B L1: 84.8% 15.2%

[libx264 @ 0x57b7997c2680] kb/s:2576.70
```