!pip install ultralytics

```
Downloading nvidia_cuda_runtime_cu12-12.4.127-py3-none-manylinux2014_x86_64.whl (883 kB)
                                                 883.7/883.7 kB 31.5 MB/s eta 0:00:00
     Downloading nvidia_cudnn_cu12-9.1.0.70-py3-none-manylinux2014_x86_64.whl (664.8 MB)
                                                 664.8/664.8 MB 2.1 MB/s eta 0:00:00
     Downloading nvidia_cufft_cu12-11.2.1.3-py3-none-manylinux2014_x86_64.whl (211.5 MB)
                                                 211.5/211.5 MB 5.8 MB/s eta 0:00:00
     Downloading nvidia_curand_cu12-10.3.5.147-py3-none-manylinux2014_x86_64.whl (56.3 MB)
                                                 56.3/56.3 MB 12.7 MB/s eta 0:00:00
     Downloading nvidia_cusolver_cu12-11.6.1.9-py3-none-manylinux2014_x86_64.whl (127.9 MB)
                                                 127.9/127.9 MB 7.7 MB/s eta 0:00:00
     Downloading nvidia_cusparse_cu12-12.3.1.170-py3-none-manylinux2014_x86_64.whl (207.5 MB)
                                                 207.5/207.5 MB 5.4 MB/s eta 0:00:00
     Downloading nvidia_nvjitlink_cu12-12.4.127-py3-none-manylinux2014_x86_64.whl (21.1 MB)
                                                - 21.1/21.1 MB 42.8 MB/s eta 0:00:00
     Downloading ultralytics_thop-2.0.14-py3-none-any.whl (26 kB)
     Installing collected packages: nvidia-nvjitlink-cu12, nvidia-curand-cu12, nvidia-cufft-cu12, nvidia-cuda-runtime-cu12, nvidia-cud
       Attempting uninstall: nvidia-nvjitlink-cu12
         Found existing installation: nvidia-nvjitlink-cu12 12.5.82
         Uninstalling nvidia-nvjitlink-cu12-12.5.82:
           Successfully uninstalled nvidia-nvjitlink-cu12-12.5.82
       Attempting uninstall: nvidia-curand-cu12
         Found existing installation: nvidia-curand-cu12 10.3.6.82
         Uninstalling nvidia-curand-cu12-10.3.6.82:
           Successfully uninstalled nvidia-curand-cu12-10.3.6.82
       Attempting uninstall: nvidia-cufft-cu12
         Found existing installation: nvidia-cufft-cu12 11.2.3.61
         Uninstalling nvidia-cufft-cu12-11.2.3.61:
           Successfully uninstalled nvidia-cufft-cu12-11.2.3.61
       Attempting uninstall: nvidia-cuda-runtime-cu12
         Found existing installation: nvidia-cuda-runtime-cu12 12.5.82
         Uninstalling nvidia-cuda-runtime-cu12-12.5.82:
           Successfully uninstalled nvidia-cuda-runtime-cu12-12.5.82
       Attempting uninstall: nvidia-cuda-nvrtc-cu12
         Found existing installation: nvidia-cuda-nvrtc-cu12 12.5.82
         Uninstalling nvidia-cuda-nvrtc-cu12-12.5.82:
           Successfully uninstalled nvidia-cuda-nvrtc-cu12-12.5.82
       Attempting uninstall: nvidia-cuda-cupti-cu12
         Found existing installation: nvidia-cuda-cupti-cu12 12.5.82
         Uninstalling nvidia-cuda-cupti-cu12-12.5.82:
           Successfully uninstalled nvidia-cuda-cupti-cu12-12.5.82
       Attempting uninstall: nvidia-cublas-cu12
         Found existing installation: nvidia-cublas-cu12 12.5.3.2
         Uninstalling nvidia-cublas-cu12-12.5.3.2:
           Successfully uninstalled nvidia-cublas-cu12-12.5.3.2
       Attempting uninstall: nvidia-cusparse-cu12
         Found existing installation: nvidia-cusparse-cu12 12.5.1.3
         Uninstalling nvidia-cusparse-cu12-12.5.1.3:
           Successfully uninstalled nvidia-cusparse-cu12-12.5.1.3
       Attempting uninstall: nvidia-cudnn-cu12
         Found existing installation: nvidia-cudnn-cu12 9.3.0.75
         Uninstalling nvidia-cudnn-cu12-9.3.0.75:
           Successfully uninstalled nvidia-cudnn-cu12-9.3.0.75
       Attempting uninstall: nvidia-cusolver-cu12
         Found existing installation: nvidia-cusolver-cu12 11.6.3.83
         Uninstalling nvidia-cusolver-cu12-11.6.3.83:
           Successfully uninstalled nvidia-cusolver-cu12-11.6.3.83
     Successfully installed nvidia-cublas-cu12-12.4.5.8 nvidia-cuda-cupti-cu12-12.4.127 nvidia-cuda-nvrtc-cu12-12.4.127 nvidia-cuda-ru
from ultralvtics import YOLO
# Build a YOLOv9c model from pretrained weight
model = YOLO('yolov9c.pt')
# Run inference
resuls = model('1.mp4', save=True)
\rightarrow
```

```
video 1/1 (frame 360/559) /content/1.mp4: 384x640 8 persons, 1 Dicycle, 4 nandbags, 19.6ms
     video 1/1 (frame 361/559) /content/1.mp4: 384x640 8 persons, 1 bicycle, 5 handbags, 19.6ms
     video 1/1 (frame 362/559) /content/1.mp4: 384x640 8 persons, 1 bicycle, 6 handbags, 19.6ms
     video 1/1 (frame 363/559) /content/1.mp4: 384x640 10 persons, 1 bicycle, 6 handbags, 19.6ms
     video 1/1 (frame 364/559) /content/1.mp4: 384x640 8 persons, 1 bicycle, 6 handbags, 19.6ms
     video 1/1 (frame 365/559) /content/1.mp4: 384x640 8 persons, 1 bicycle, 6 handbags, 19.6ms
     video 1/1 (frame 366/559) /content/1.mp4: 384x640 9 persons, 1 bicycle, 8 handbags, 19.6ms
     video 1/1 (frame 367/559) /content/1.mp4: 384x640 9 persons, 1 bicycle, 5 handbags, 19.6ms
     video 1/1 (frame 368/559) /content/1.mp4: 384x640 10 persons, 1 bicycle, 5 handbags, 19.6ms
     video 1/1 (frame 369/559) /content/1.mp4: 384x640 10 persons, 1 bicycle, 5 handbags, 19.6ms
     video 1/1 (frame 370/559) /content/1.mp4: 384x640 9 persons, 1 bicycle, 5 handbags, 19.6ms
     video 1/1 (frame 371/559) /content/1.mp4: 384x640 9 persons, 1 bicycle, 5 handbags, 19.6ms
     video 1/1 (frame 372/559) /content/1.mp4: 384x640 9 persons, 1 bicycle, 5 handbags, 19.6ms
     video 1/1 (frame 373/559) /content/1.mp4: 384x640 9 persons, 1 bicycle, 6 handbags, 19.6ms
     video 1/1 (frame 374/559) /content/1.mp4: 384x640 9 persons, 1 bicycle, 6 handbags, 23.2ms
     video 1/1 (frame 375/559) /content/1.mp4: 384x640 8 persons, 1 bicycle, 7 handbags, 19.6ms
     video 1/1 (frame 376/559) /content/1.mp4: 384x640 8 persons, 1 bicycle, 7 handbags, 19.6ms
     video 1/1 (frame 377/559) /content/1.mp4: 384x640 9 persons, 1 bicycle, 7 handbags, 19.6ms
     video 1/1 (frame 378/559) /content/1.mp4: 384x640 9 persons, 1 bicycle, 7 handbags, 19.6ms
     video 1/1 (frame 379/559) /content/1.mp4: 384x640 9 persons, 1 bicycle, 7 handbags, 20.3ms
     video 1/1 (frame 380/559) /content/1.mp4: 384x640 10 persons, 1 bicycle, 7 handbags, 19.6ms
     video 1/1 (frame 381/559) /content/1.mp4: 384x640 9 persons, 1 bicycle, 7 handbags, 19.6ms
     video 1/1 (frame 382/559) /content/1.mp4: 384x640 8 persons, 1 bicycle, 7 handbags, 19.6ms
     video 1/1 (frame 383/559) /content/1.mp4: 384x640 7 persons, 1 bicycle, 7 handbags, 19.6ms
     video 1/1 (frame 384/559) /content/1.mp4: 384x640 8 persons, 1 bicycle, 7 handbags, 19.6ms
     video 1/1 (frame 385/559) /content/1.mp4: 384x640 7 persons, 1 bicycle, 6 handbags, 19.6ms
     video 1/1 (frame 386/559) /content/1.mp4: 384x640 7 persons, 1 bicycle, 6 handbags, 19.6ms
     video 1/1 (frame 387/559) /content/1.mp4: 384x640 7 persons, 1 bicycle, 6 handbags, 19.7ms
     video 1/1 (frame 388/559) /content/1.mp4: 384x640 7 persons, 1 bicycle, 6 handbags, 19.5ms
     video 1/1 (frame 389/559) /content/1.mp4: 384x640 7 persons, 1 bicycle, 6 handbags, 18.9ms
     video 1/1 (frame 390/559) /content/1.mp4: 384x640 7 persons, 1 bicycle, 6 handbags, 18.9ms
     video 1/1 (frame 391/559) /content/1.mp4: 384x640 7 persons, 2 bicycles, 6 handbags, 18.9ms
     video 1/1 (frame 392/559) /content/1.mp4: 384x640 7 persons, 2 bicycles, 7 handbags, 18.8ms
     video 1/1 (frame 393/559) /content/1.mp4: 384x640 8 persons, 1 bicycle, 6 handbags, 18.2ms
     video 1/1 (frame 394/559) /content/1.mp4: 384x640 8 persons, 6 handbags, 18.1ms
     video 1/1 (frame 395/559) /content/1.mp4: 384x640 8 persons, 7 handbags, 18.6ms
     video 1/1 (frame 396/559) /content/1.mp4: 384x640 8 persons, 6 handbags, 18.2ms
     video 1/1 (frame 397/559) /content/1.mp4: 384x640 8 persons, 7 handbags, 18.2ms
     video 1/1 (frame 398/559) /content/1.mp4: 384x640 7 persons, 7 handbags, 18.1ms
     video 1/1 (frame 399/559) /content/1.mp4: 384x640 6 persons, 8 handbags, 21.1ms
     video 1/1 (frame 400/559) /content/1.mp4: 384x640 9 persons, 7 handbags, 18.1ms
     video 1/1 (frame 401/559) /content/1.mp4: 384x640 8 persons, 7 handbags, 18.1ms
from ultralytics import YOLO
#Load an official or custom model
```

model = YOLO('yolov9c.pt')

results = model.track(source="1.mp4", save=True)



```
video 1/1 (frame 548/559) /content/1.mp4: 384x640 5 persons, 1 bicycle, 4 handbags, 29.0ms
     video 1/1 (frame 549/559) /content/1.mp4: 384x640 5 persons, 1 bicycle, 4 handbags, 29.0ms
     video 1/1 (frame 550/559) /content/1.mp4: 384x640 5 persons, 1 bicycle, 3 handbags, 29.1ms
     video 1/1 (frame 551/559) /content/1.mp4: 384x640 5 persons, 1 bicycle, 3 handbags, 29.0ms
     video 1/1 (frame 552/559) /content/1.mp4: 384x640 5 persons, 1 bicycle, 3 handbags, 29.1ms
     video 1/1 (frame 553/559) /content/1.mp4: 384x640 5 persons, 1 bicycle, 3 handbags, 29.0ms
     video 1/1 (frame 554/559) /content/1.mp4: 384x640 5 persons, 1 bicycle, 3 handbags, 29.1ms
     video 1/1 (frame 555/559) /content/1.mp4: 384x640 5 persons, 1 bicycle, 3 handbags, 27.5ms
     video 1/1 (frame 556/559) /content/1.mp4: 384x640 5 persons, 1 bicycle, 3 handbags, 27.5ms
     video 1/1 (frame 557/559) /content/1.mp4: 384x640 5 persons, 1 bicycle, 3 handbags, 27.5ms
     video 1/1 (frame 558/559) /content/1.mp4: 384x640 5 persons, 1 bicycle, 1 backpack, 3 handbags, 27.5ms
     video 1/1 (frame 559/559) /content/1.mp4: 384x640 5 persons, 1 bicycle, 1 backpack, 4 handbags, 27.4ms
     Speed: 2.3ms preprocess, 28.0ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)
     Results saved to runs/detect/track
Start coding or generate with AI.
```

video 1/1 (frame 545/559) /content/1.mp4: 304x040 3 persons, 1 bicycle, 4 handbags, 29.0ms video 1/1 (frame 545/559) /content/1.mp4: 384x640 5 persons, 1 bicycle, 4 handbags, 29.0ms video 1/1 (frame 546/559) /content/1.mp4: 384x640 5 persons, 1 bicycle, 4 handbags, 29.1ms video 1/1 (frame 547/559) /content/1.mp4: 384x640 5 persons, 1 bicycle, 4 handbags, 29.1ms

- Start coding or  $\underline{\text{generate}}$  with AI.
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