```
In [1]: import urllib.request
        zip_url= 'https://storage.googleapis.com/kaggle-data-sets/5043911/8461408/bundle/archive
        # Download the zip file
        urllib.request.urlretrieve(zip_url, "file.zip")
        ('file.zip', <http.client.HTTPMessage at 0x7c6c7ed1f010>)
Out[1]:
        import zipfile
In [2]:
        with zipfile.ZipFile("file.zip", 'r') as zip_ref:
            zip_ref.extractall("extracted_contents")
In [3]: !pip install git+https://github.com/THU-MIG/yolov10.git
        Collecting git+https://github.com/THU-MIG/yolov10.git
          Cloning https://github.com/THU-MIG/yolov10.git to /tmp/pip-req-build-061qhcdu
          Running command git clone --filter=blob:none --quiet https://github.com/THU-MIG/yolov1
        0.git /tmp/pip-req-build-061qhcdu
          Resolved https://github.com/THU-MIG/yolov10.git to commit 2c36ab0f108efdd17c7e290564bb
        845ccb6844d8
          Installing build dependencies ... done
          Getting requirements to build wheel ... done
          Preparing metadata (pyproject.toml) ... done
        Requirement already satisfied: matplotlib>=3.3.0 in /usr/local/lib/python3.10/dist-packa
        ges (from ultralytics==8.1.34) (3.7.1)
        Requirement already satisfied: opencv-python>=4.6.0 in /usr/local/lib/python3.10/dist-pa
        ckages (from ultralytics==8.1.34) (4.8.0.76)
        Requirement already satisfied: pillow>=7.1.2 in /usr/local/lib/python3.10/dist-packages
        (from ultralytics==8.1.34) (9.4.0)
        Requirement already satisfied: pyyaml>=5.3.1 in /usr/local/lib/python3.10/dist-packages
        (from ultralytics==8.1.34) (6.0.1)
        Requirement already satisfied: requests>=2.23.0 in /usr/local/lib/python3.10/dist-packag
        es (from ultralytics==8.1.34) (2.31.0)
        Requirement already satisfied: scipy>=1.4.1 in /usr/local/lib/python3.10/dist-packages
        (from ultralytics==8.1.34) (1.11.4)
        Requirement already satisfied: torch>=1.8.0 in /usr/local/lib/python3.10/dist-packages
        (from ultralytics==8.1.34) (2.3.0+cu121)
        Requirement already satisfied: torchvision>=0.9.0 in /usr/local/lib/python3.10/dist-pack
        ages (from ultralytics==8.1.34) (0.18.0+cu121)
        Requirement already satisfied: tqdm>=4.64.0 in /usr/local/lib/python3.10/dist-packages
        (from ultralytics==8.1.34) (4.66.4)
        Requirement already satisfied: psutil in /usr/local/lib/python3.10/dist-packages (from u
        ltralytics==8.1.34) (5.9.5)
        Requirement already satisfied: py-cpuinfo in /usr/local/lib/python3.10/dist-packages (fr
        om ultralytics==8.1.34) (9.0.0)
        Collecting thop>=0.1.1 (from ultralytics==8.1.34)
          Downloading thop-0.1.1.post2209072238-py3-none-any.whl (15 kB)
        Requirement already satisfied: pandas>=1.1.4 in /usr/local/lib/python3.10/dist-packages
        (from ultralytics==8.1.34) (2.0.3)
        Requirement already satisfied: seaborn>=0.11.0 in /usr/local/lib/python3.10/dist-package
        s (from ultralytics==8.1.34) (0.13.1)
        Requirement already satisfied: contourpy>=1.0.1 in /usr/local/lib/python3.10/dist-packag
        es (from matplotlib>=3.3.0->ultralytics==8.1.34) (1.2.1)
        Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.10/dist-packages
        (from matplotlib >= 3.3.0 -> ultralytics == 8.1.34) (0.12.1)
        Requirement already satisfied: fonttools>=4.22.0 in /usr/local/lib/python3.10/dist-packa
        ges (from matplotlib>=3.3.0->ultralytics==8.1.34) (4.53.0)
        Requirement already satisfied: kiwisolver>=1.0.1 in /usr/local/lib/python3.10/dist-packa
        ges (from matplotlib>=3.3.0->ultralytics==8.1.34) (1.4.5)
        Requirement already satisfied: numpy>=1.20 in /usr/local/lib/python3.10/dist-packages (f
        rom matplotlib>=3.3.0->ultralytics==8.1.34) (1.25.2)
```

```
Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.10/dist-package
s (from matplotlib>=3.3.0->ultralytics==8.1.34) (24.1)
Requirement already satisfied: pyparsing>=2.3.1 in /usr/local/lib/python3.10/dist-packag
es (from matplotlib>=3.3.0->ultralytics==8.1.34) (3.1.2)
Requirement already satisfied: python-dateutil>=2.7 in /usr/local/lib/python3.10/dist-pa
ckages (from matplotlib>=3.3.0->ultralytics==8.1.34) (2.8.2)
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.10/dist-packages
(from pandas>=1.1.4->ultralytics==8.1.34) (2023.4)
Requirement already satisfied: tzdata>=2022.1 in /usr/local/lib/python3.10/dist-packages
(from pandas>=1.1.4->ultralytics==8.1.34) (2024.1)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dis
t-packages (from requests>=2.23.0->ultralytics==8.1.34) (3.3.2)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages
(from requests>=2.23.0->ultralytics==8.1.34) (3.7)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-pack
ages (from requests>=2.23.0->ultralytics==8.1.34) (2.0.7)
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-pack
ages (from requests>=2.23.0->ultralytics==8.1.34) (2024.6.2)
Requirement already satisfied: filelock in /usr/local/lib/python3.10/dist-packages (from
torch>=1.8.0->ultralytics==8.1.34) (3.14.0)
Requirement already satisfied: typing-extensions>=4.8.0 in /usr/local/lib/python3.10/dis
t-packages (from torch>=1.8.0->ultralytics==8.1.34) (4.12.2)
Requirement already satisfied: sympy in /usr/local/lib/python3.10/dist-packages (from to
rch>=1.8.0->ultralytics==8.1.34) (1.12.1)
Requirement already satisfied: networkx in /usr/local/lib/python3.10/dist-packages (from
torch>=1.8.0->ultralytics==8.1.34) (3.3)
Requirement already satisfied: jinja2 in /usr/local/lib/python3.10/dist-packages (from t
orch>=1.8.0->ultralytics==8.1.34) (3.1.4)
Requirement already satisfied: fsspec in /usr/local/lib/python3.10/dist-packages (from t
orch>=1.8.0->ultralytics==8.1.34) (2023.6.0)
Collecting nvidia-cuda-nvrtc-cu12==12.1.105 (from torch>=1.8.0->ultralytics==8.1.34)
  Using cached nvidia_cuda_nvrtc_cu12-12.1.105-py3-none-manylinux1_x86_64.whl (23.7 MB)
Collecting nvidia-cuda-runtime-cu12==12.1.105 (from torch>=1.8.0->ultralytics==8.1.34)
  Using cached nvidia_cuda_runtime_cu12-12.1.105-py3-none-manylinux1_x86_64.whl (823 kB)
Collecting nvidia-cuda-cupti-cu12==12.1.105 (from torch>=1.8.0->ultralytics==8.1.34)
  Using cached nvidia_cuda_cupti_cu12-12.1.105-py3-none-manylinux1_x86_64.whl (14.1 MB)
Collecting nvidia-cudnn-cu12==8.9.2.26 (from torch>=1.8.0->ultralytics==8.1.34)
  Using cached nvidia_cudnn_cu12-8.9.2.26-py3-none-manylinux1_x86_64.whl (731.7 MB)
Collecting nvidia-cublas-cu12==12.1.3.1 (from torch>=1.8.0->ultralytics==8.1.34)
  Using cached nvidia_cublas_cu12-12.1.3.1-py3-none-manylinux1_x86_64.whl (410.6 MB)
Collecting nvidia-cufft-cu12==11.0.2.54 (from torch>=1.8.0->ultralytics==8.1.34)
  Using cached nvidia_cufft_cu12-11.0.2.54-py3-none-manylinux1_x86_64.whl (121.6 MB)
Collecting nvidia-curand-cu12==10.3.2.106 (from torch>=1.8.0->ultralytics==8.1.34)
  Using cached nvidia_curand_cu12-10.3.2.106-py3-none-manylinux1_x86_64.whl (56.5 MB)
Collecting nvidia-cusolver-cu12==11.4.5.107 (from torch>=1.8.0->ultralytics==8.1.34)
  Using cached nvidia_cusolver_cu12-11.4.5.107-py3-none-manylinux1_x86_64.whl (124.2 MB)
Collecting nvidia-cusparse-cu12==12.1.0.106 (from torch>=1.8.0->ultralytics==8.1.34)
  Using cached nvidia_cusparse_cu12-12.1.0.106-py3-none-manylinux1_x86_64.whl (196.0 MB)
Collecting nvidia-nccl-cu12==2.20.5 (from torch>=1.8.0->ultralytics==8.1.34)
  Using cached nvidia_nccl_cu12-2.20.5-py3-none-manylinux2014_x86_64.whl (176.2 MB)
Collecting nvidia-nvtx-cu12==12.1.105 (from torch>=1.8.0->ultralytics==8.1.34)
  Using cached nvidia_nvtx_cu12-12.1.105-py3-none-manylinux1_x86_64.whl (99 kB)
Requirement already satisfied: triton==2.3.0 in /usr/local/lib/python3.10/dist-packages
(from torch >= 1.8.0 -> ultralytics == 8.1.34) (2.3.0)
Collecting nvidia-nvjitlink-cu12 (from nvidia-cusolver-cu12==11.4.5.107->torch>=1.8.0->u
ltralytics==8.1.34)
  Downloading nvidia_nvjitlink_cu12-12.5.40-py3-none-manylinux2014_x86_64.whl (21.3 MB)
    Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.10/dist-packages (from
 python-dateutil>=2.7->matplotlib>=3.3.0->ultralytics==8.1.34) (1.16.0)
Requirement already satisfied: MarkupSafe>=2.0 in /usr/local/lib/python3.10/dist-package
s (from jinja2->torch>=1.8.0->ultralytics==8.1.34) (2.1.5)
Requirement already satisfied: mpmath<1.4.0,>=1.1.0 in /usr/local/lib/python3.10/dist-pa
ckages (from sympy->torch>=1.8.0->ultralytics==8.1.34) (1.3.0)
Building wheels for collected packages: ultralytics
  Building wheel for ultralytics (pyproject.toml) ... done
```

Created wheel for ultralytics: filename=ultralytics-8.1.34-py3-none-any.whl size=73124 4 sha256=2020ea8c268bd60de5ce2c5154b2c0dc987e40cdedb39720a9f6749c3ae7400a Stored in directory: /tmp/pip-ephem-wheel-cache-elj63tj5/wheels/43/69/ce/a29f8e396d41e

Successfully built ultralytics

dc5db9476051cc64b70a69ade35dc81efbec9

Installing collected packages: nvidia-nvtx-cu12, nvidia-nvjitlink-cu12, nvidia-nccl-cu12, nvidia-curand-cu12, nvidia-cufft-cu12, nvidia-cuda-runtime-cu12, nvidia-cuda-nvrtc-cu12, nvidia-cuda-cupti-cu12, nvidia-cublas-cu12, nvidia-cusparse-cu12, nvidia-cudnn-cu12, nvidia-cusolver-cu12, thop, ultralytics

Successfully installed nvidia-cublas-cu12-12.1.3.1 nvidia-cuda-cupti-cu12-12.1.105 nvidia-cuda-nvrtc-cu12-12.1.105 nvidia-cuda-runtime-cu12-12.1.105 nvidia-cudnn-cu12-8.9.2.26 nvidia-cufft-cu12-11.0.2.54 nvidia-curand-cu12-10.3.2.106 nvidia-cusolver-cu12-11.4.5.1 07 nvidia-cusparse-cu12-12.1.0.106 nvidia-nccl-cu12-2.20.5 nvidia-nvjitlink-cu12-12.5.40 nvidia-nvtx-cu12-12.1.105 thop-0.1.1.post2209072238 ultralytics-8.1.34

Training

```
import ultralytics
In [4]:
        from ultralytics import YOLOv10
In [5]: model = YOLOv10.from_pretrained('jameslahm/yolov10x')
        /usr/local/lib/python3.10/dist-packages/huggingface_hub/utils/_token.py:89: UserWarning:
        The secret `HF_TOKEN` does not exist in your Colab secrets.
        To authenticate with the Hugging Face Hub, create a token in your settings tab (https://
        huggingface.co/settings/tokens), set it as secret in your Google Colab and restart your
        session.
        You will be able to reuse this secret in all of your notebooks.
        Please note that authentication is recommended but still optional to access public model
        s or datasets.
          warnings.warn(
                                     | 0.00/1.72k [00:00<?, ?B/s]
        config.json:
        model.safetensors:
                             0%|
                                           | 0.00/128M [00:00<?, ?B/s]
        model.train(
In [6]:
            data="/content/extracted_contents/football_players_detection/football_players_detect
            epochs=8,
            batch=8,
            imgsz=640,
            device=0,
            lr0=0.01,
            momentum=0.937,
            weight_decay=0.0005,
            patience=50,
            optimizer="Adam",
            workers=8,
            verbose=True
        )
```

New https://pypi.org/project/ultralytics/8.2.35 available \square Update with 'pip install -U ultralytics'

Ultralytics YOLOV8.1.34 □ Python-3.10.12 torch-2.3.0+cu121 CUDA:0 (Tesla T4, 15102MiB) engine/trainer: task=detect, mode=train, model=yolov10x.yaml, data=/content/extracted_contents/football_players_detection/football_players_detection/data.yaml, epochs=8, time=N one, patience=50, batch=8, imgsz=640, save=True, save_period=-1, val_period=1, cache=Fal se, device=0, workers=8, project=None, name=train, exist_ok=False, pretrained=True, opti mizer=Adam, verbose=True, seed=0, deterministic=True, single_cls=False, rect=False, cos_lr=False, close_mosaic=10, resume=False, amp=True, fraction=1.0, profile=False, freeze=N one, multi_scale=False, overlap_mask=True, mask_ratio=4, dropout=0.0, val=True, split=val, save_json=False, save_hybrid=False, conf=None, iou=0.7, max_det=300, half=False, dnn=False, plots=True, source=None, vid_stride=1, stream_buffer=False, visualize=False, augment=False, agnostic_nms=False, classes=None, retina_masks=False, embed=None, show=False,

save_frames=False, save_txt=False, save_conf=False, save_crop=False, show_labels=True, show_conf=True, show_boxes=True, line_width=None, format=torchscript, keras=False, opti mize=False, int8=False, dynamic=False, simplify=False, opset=None, workspace=4, nms=False, lr0=0.01, lrf=0.01, momentum=0.937, weight_decay=0.0005, warmup_epochs=3.0, warmup_momentum=0.8, warmup_bias_lr=0.1, box=7.5, cls=0.5, dfl=1.5, pose=12.0, kobj=1.0, label_smoothing=0.0, nbs=64, hsv_h=0.015, hsv_s=0.7, hsv_v=0.4, degrees=0.0, translate=0.1, scale=0.5, shear=0.0, perspective=0.0, flipud=0.0, fliplr=0.5, bgr=0.0, mosaic=1.0, mixup=0.0, copy_paste=0.0, auto_augment=randaugment, erasing=0.4, crop_fraction=1.0, cfg=None, tracker=botsort.yaml, save_dir=runs/detect/train
Downloading https://ultralytics.com/assets/Arial.ttf to '/root/.config/yolov10/Arial.tt

100%| 755k/755k [00:00<00:00, 24.5MB/s]

Overriding model.yaml nc=80 with nc=2

f'...

from	n	params	module	argum	
ents 0 -1	1	2320	ultralytics.nn.modules.conv.Conv	[3, 8	
0, 3, 2]	1	115520	ultralytics.nn.modules.conv.Conv	[80,	
160, 3, 2]	3	436800	ultralytics.nn.modules.block.C2f	[160,	
160, 3, True] 3 -1	1	461440	ultralytics.nn.modules.conv.Conv	[160,	
320, 3, 2]	6	3281920	ultralytics.nn.modules.block.C2f	[320,	
320, 6, True] 5 -1	1	213120	ultralytics.nn.modules.block.SCDown	[320,	
640, 3, 2]	6	4604160	ultralytics.nn.modules.block.C2fCIB	[640,	
640, 6, True] 7 -1	1	417920	ultralytics.nn.modules.block.SCDown	[640,	
640, 3, 2] 8 -1	3	2712960	ultralytics.nn.modules.block.C2fCIB	[640,	
640, 3, True] 9 -1	1	1025920	ultralytics.nn.modules.block.SPPF	[640,	
640, 5] 10 -1	1	1545920	ultralytics.nn.modules.block.PSA	[640,	
640] 11 -1	1	Θ	torch.nn.modules.upsampling.Upsample	[Non	
e, 2, 'nearest'] 12 [-1, 6]	1	Θ	ultralytics.nn.modules.conv.Concat	[1]	
13 -1	3	3122560	ultralytics.nn.modules.block.C2fCIB	[128	
0, 640, 3, True] 14 -1	1	Θ	torch.nn.modules.upsampling.Upsample	[Non	
e, 2, 'nearest'] 15 [-1, 4]	1	Θ	ultralytics.nn.modules.conv.Concat	[1]	
16 -1	3	1948800	ultralytics.nn.modules.block.C2f	[960,	
	1	922240	ultralytics.nn.modules.conv.Conv	[320,	
320, 3, 2] 18 [-1, 13]	1	Θ	ultralytics.nn.modules.conv.Concat	[1]	
19 -1	3	2917760	ultralytics.nn.modules.block.C2fCIB	[960,	
640, 3, True] 20 -1	1	417920	ultralytics.nn.modules.block.SCDown	[640,	
640, 3, 2] 21 [-1, 10]	1	Θ	ultralytics.nn.modules.conv.Concat	[1]	
22 -1	3	3122560	ultralytics.nn.modules.block.C2fCIB	[128	
0, 640, 3, True] 23 [16, 19, 22]	1	4388892	ultralytics.nn.modules.head.v10Detect	[2,	
[320, 640, 640]] YOLOv10x summary: 688 layers, 31658732 parameters, 31658716 gradients, 171.0 GFLOPs					

TensorBoard: Start with 'tensorboard --logdir runs/detect/train', view at http://localhost:6006/

Freezing layer 'model.23.dfl.conv.weight'

AMP: running Automatic Mixed Precision (AMP) checks with YOLOv8n...

Downloading https://github.com/ultralytics/assets/releases/download/v8.1.0/yolov8n.pt to 'yolov8n.pt'...

100%| 6.23M/6.23M [00:00<00:00, 99.1MB/s]

/usr/local/lib/python3.10/dist-packages/torch/nn/modules/conv.py:456: UserWarning: Plan failed with a cudnnException: CUDNN_BACKEND_EXECUTION_PLAN_DESCRIPTOR: cudnnFinalize Des criptor Failed cudnn_status: CUDNN_STATUS_NOT_SUPPORTED (Triggered internally at ../ate n/src/ATen/native/cudnn/Conv_v8.cpp:919.)

return F.conv2d(input, weight, bias, self.stride,

AMP: checks passed

train: Scanning /content/extracted_contents/football_players_detection/football_players_
detection/train/labels... 10308 images, 623 backgrounds, 0 corrupt: 100%| 10308 [00:21<00:00, 471.86it/s]</pre>

train: New cache created: /content/extracted_contents/football_players_detection/footbal
l_players_detection/train/labels.cache

albumentations: Blur(p=0.01, blur_limit=(3, 7)), MedianBlur(p=0.01, blur_limit=(3, 7)), ToGray(p=0.01), CLAHE(p=0.01, clip_limit=(1, 4.0), tile_grid_size=(8, 8))

/usr/lib/python3.10/multiprocessing/popen_fork.py:66: RuntimeWarning: os.fork() was call ed. os.fork() is incompatible with multithreaded code, and JAX is multithreaded, so this will likely lead to a deadlock.

self.pid = os.fork()

val: Scanning /content/extracted_contents/football_players_detection/football_players_de
tection/valid/labels... 972 images, 30 backgrounds, 0 corrupt: 100%| 972/972
[00:02<00:00, 457.37it/s]</pre>

val: New cache created: /content/extracted_contents/football_players_detection/football_
players_detection/valid/labels.cache

Plotting labels to runs/detect/train/labels.jpg...

optimizer: Adam(lr=0.01, momentum=0.937) with parameter groups 185 weight(decay=0.0), 19
8 weight(decay=0.0005), 197 bias(decay=0.0)

TensorBoard: model graph visualization added

Image sizes 640 train, 640 val

Using 2 dataloader workers

Logging results to runs/detect/train

Starting training for 8 epochs...

Epoch Instances		box_om	cls_om	dfl_om	box_oo	cls_oo	dfl_oo
1/8 25 5): 100%	Class	Images	1.68 1289/1 100:00, 1.169 10:00, 1.169	1289 [15:23 Box(P		0it/s]	1.738 mAP50-9
	all	972	5407	_	0.341	0.393	0.183
Epoch Instances		box_om	cls_om	dfl_om	box_oo	cls_oo	dfl_oo
2/8 15	640: 1 Class	100%	1.214 1289/1 1nstances 00:00, 1.119	1289 [14:43< Box(P		6it/s]	1.46 mAP50-9
5): 100%	all	972	5407	_	0.507	0.531	0.263
Epoch Instances		box_om	cls_om	dfl_om	box_oo	cls_oo	dfl_oo
3/8 9	640:		1.118 1.289/1	1289 [14:32	<00:00, 1.4	8it/s]	
5): 100%	Class 61/0	_	Instances 00:00, 1.14:	•	R	mAP50	mAP50-9
	all	972	5407	0.707	0.5	0.549	0.268

```
Epoch
               GPU_mem
                           box_om
                                      cls_om
                                                  dfl_om
                                                             box_oo
                                                                        cls_oo
                                                                                    dfl_oo
  Instances
                  Size
        4/8
                 10.7G
                            1.547
                                                   1.357
                                       1.031
                                                              1.689
                                                                         1.219
                                                                                     1.375
         43
                   640: 100%|
                                      1289/1289 [14:32<00:00, 1.48it/s]
                                                                         mAP50
                           Images Instances
                                                                  R
                                                                                mAP50-9
                 Class
                                                   Box(P
                   | 61/61 [01:08<00:00, 1.13s/it]
5): 100%
                                         5407
                   all
                              972
                                                   0.701
                                                              0.537
                                                                         0.566
                                                                                     0.265
               GPU_mem
      Epoch
                           box_om
                                                  dfl_om
                                                             box_oo
                                                                        cls_oo
                                                                                    dfl_oo
                                       cls_om
  Instances
                  Size
        5/8
                 10.6G
                            1.546
                                       1.018
                                                   1.353
                                                              1.684
                                                                         1.193
                                                                                      1.37
         22
                   640: 100%|
                                       | 1289/1289 [14:28<00:00, 1.48it/s]
                 Class
                           Images Instances
                                                   Box(P
                                                                  R
                                                                         mAP50
                                                                                mAP50-9
                  [ 61/61 [01:09<00:00, 1.14s/it]
5): 100%
                   all
                              972
                                         5407
                                                   0.671
                                                              0.541
                                                                         0.576
                                                                                     0.276
      Epoch
               GPU_mem
                           box_om
                                      cls_om
                                                  dfl_om
                                                             box_oo
                                                                        cls_oo
                                                                                    dfl_oo
  Instances
                  Size
        6/8
                 10.7G
                            1.488
                                      0.9556
                                                   1.318
                                                              1.619
                                                                         1.123
                                                                                     1.334
         20
                   640: 100%
                                     | 1289/1289 [14:29<00:00, 1.48it/s]
                           Images Instances
                                                   Box(P
                                                                         mAP50
                                                                                mAP50-9
                 Class
                 61/61 [01:09<00:00, 1.14s/it]
5): 100%
                   all
                              972
                                         5407
                                                    0.74
                                                              0.537
                                                                         0.578
                                                                                     0.307
                                                                                    dfl_oo
      Epoch
               GPU_mem
                                      cls_om
                                                                        cls_oo
                           box_om
                                                  dfl_om
                                                             box_oo
  Instances
                  Size
        7/8
                 10.7G
                            1.458
                                      0.9079
                                                   1.297
                                                              1.592
                                                                         1.059
                                                                                     1.311
                                      1289/1289 [14:46<00:00, 1.45it/s]
         11
                   640: 100%|
                 Class
                           Images Instances
                                                   Box(P
                                                                  R
                                                                         mAP50
                                                                                 mAP50-9
                 61/61 [01:09<00:00, 1.14s/it]
5): 100%|
                   all
                              972
                                         5407
                                                   0.776
                                                              0.541
                                                                         0.606
                                                                                     0.328
      Epoch
               GPU_mem
                                                             box_oo
                                                                                    dfl_oo
                           box_om
                                      cls_om
                                                  dfl_om
                                                                        cls_oo
  Instances
                  Size
        8/8
                 10.7G
                            1.409
                                      0.8582
                                                   1.264
                                                              1.539
                                                                        0.9916
                                                                                      1.28
         22
                   640: 100%
                                      1289/1289 [14:25<00:00, 1.49it/s]
                 Class
                           Images Instances
                                                   Box(P
                                                                  R
                                                                         mAP50
                                                                                 mAP50-9
                   || 61/61 [01:09<00:00, 1.14s/it]
                   all
                              972
                                         5407
                                                              0.597
                                                                          0.66
                                                                                     0.344
                                                   0.805
```

8 epochs completed in 2.159 hours.

Optimizer stripped from runs/detect/train/weights/last.pt, 64.1MB Optimizer stripped from runs/detect/train/weights/best.pt, 64.1MB

Validating runs/detect/train/weights/best.pt...

Ultralytics YOLOv8.1.34 D Python-3.10.12 torch-2.3.0+cu121 CUDA:0 (Tesla T4, 15102MiB) YOLOv10x summary (fused): 503 layers, 31587932 parameters, 0 gradients, 169.8 GFLOPS

	Class	Images	Instances	Box(P	R	mAP50	mAP50-9
5):	100% 61/61	[01:08<0	0:00, 1.139	s/it]			
	all	972	5407	0.805	0.597	0.66	0.344
	football	972	275	0.75	0.342	0.423	0.18
	player	972	5132	0.86	0.852	0.896	0.508

Speed: 0.3ms preprocess, 63.4ms inference, 0.0ms loss, 0.1ms postprocess per image Results saved to runs/detect/train

ultralytics.utils.metrics.DetMetrics object with attributes:

ap_class_index: array([0, 1])

Out[6]:

box: ultralytics.utils.metrics.Metric object

confusion_matrix: <ultralytics.utils.metrics.ConfusionMatrix object at 0x7c6a58782ce0>
curves: ['Precision-Recall(B)', 'F1-Confidence(B)', 'Precision-Confidence(B)', 'Recall-C
onfidence(B)']

curves_results: [[array([0.001001, 0.002002, 0.003003, 0.00400 Θ, 0.008008, 0.007007, 0.009009, 0.005005, 0.006006, 0.01001, 0.012012, 0.017017, 1011, 0.013013, 0.014014, 0.015015, 0.016016, 0.02002, 0.021021, 0.022022, 0.018018, 0.019019, 0.023023,

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          0.96512,
                     0.95168,
                                    0.947, ...,
                                                        Θ,
                                                                    Θ,
0]]), 'Confidence', 'Recall']]
fitness: 0.3756522299219187
keys: ['metrics/precision(B)', 'metrics/recall(B)', 'metrics/mAP50(B)', 'metrics/mAP50-9
5(B)']
maps: array([
               0.18034,
                         0.50785])
names: {0: 'football', 1: 'player'}
plot: True
results_dict: {'metrics/precision(B)': 0.8046776234296364, 'metrics/recall(B)': 0.596669
0285552327, 'metrics/mAP50(B)': 0.6596894735034484, 'metrics/mAP50-95(B)': 0.34409253619
06376, 'fitness': 0.3756522299219187}
save_dir: PosixPath('runs/detect/train')
speed: {'preprocess': 0.2799819035785189, 'inference': 63.39147233178095, 'loss': 0.0011
63149076234166, 'postprocess': 0.12986061504348317}
task: 'detect'
```

Save The Model

```
In [21]: state_dict = model.model.state_dict()
In [23]: import torch
In [24]: torch.save(state_dict, "yolov10_trained_state_dict.pt")
```

visulize true labels and predicted labels

```
import matplotlib.pyplot as plt
true_labels_path = "/content/runs/detect/train/val_batch1_labels.jpg"
pred_labels_path = "/content/runs/detect/train/val_batch1_pred.jpg"

image_true_loaded = cv2.imread(true_labels_path)
image_pred_loaded = cv2.imread(pred_labels_path)

image_true_loaded = cv2.cvtColor(image_true_loaded, cv2.COLOR_BGR2RGB)
image_pred_loaded = cv2.cvtColor(image_pred_loaded, cv2.COLOR_BGR2RGB)

plt.figure(figsize=(10, 5))

plt.subplot(1, 2, 1)
plt.imshow(image_true_loaded)
plt.title('True_Labels')
plt.axis('off')

plt.subplot(1, 2, 2)
plt.imshow(image_pred_loaded)
```

```
plt.title('Predicted Labels')
plt.axis('off')
plt.show()
```

True Labels



Predicted Labels



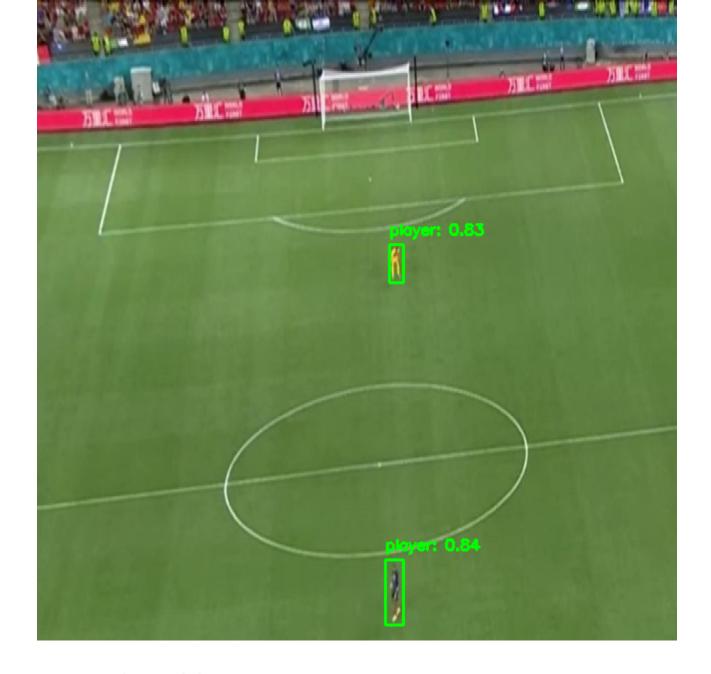
Test Random Image

import cv2

import numpy as np

In [38]:

```
from google.colab.patches import cv2_imshow
In [39]:
         image_path = "/content/extracted_contents/football_players_detection/football_players_de
         image = cv2.imread(image_path)
In [40]: resized_image = cv2.resize(image, (640, 640))
In [41]: results = model.predict(resized_image)
         0: 640x640 2 players, 80.9ms
         Speed: 2.3ms preprocess, 80.9ms inference, 1.8ms postprocess per image at shape (1, 3, 6
         40, 640)
In [42]:
         boxes = results[0].boxes.xyxy # Bounding box coordinates
         scores = results[0].boxes.conf # Confidence scores
         class_ids = results[0].boxes.cls # Class IDs
         labels = [results[0].names[int(cls)] for cls in class_ids] # Class labels
In [43]:
         # Draw boxes and labels on the image
         for box, score, label in zip(boxes, scores, labels):
             x1, y1, x2, y2 = map(int, box)
             cv2.rectangle(resized_image, (x1, y1), (x2, y2), (0, 255, 0), 2)
             text = f"{label}: {score:.2f}"
             cv2.putText(resized_image, text, (x1, y1 - 10), cv2.FONT_HERSHEY_SIMPLEX, 0.5, (0, 2
In [44]: from google.colab.patches import cv2_imshow
         cv2_imshow(resized_image)
```



Test The Video

fourcc = cv2.VideoWriter_fourcc(*'mp4v')

```
import os
In [67]:
         video_path = "/content/extracted_contents/video.mp4"
In [68]:
         video = cv2.VideoCapture(video_path)
In [69]:
         frame_width = int(video.get(cv2.CAP_PROP_FRAME_WIDTH))
         frame_height = int(video.get(cv2.CAP_PROP_FRAME_HEIGHT))
         fps = int(video.get(cv2.CAP_PROP_FPS))
         output_dir = "/content/"
In [70]:
         output_path = os.path.join(output_dir, "output_video.mp4")
         os.makedirs(output_dir, exist_ok=True)
In [71]:
In [72]:
         if not os.access(output_dir, os.W_OK):
             raise PermissionError(f"No write permission for the directory: {output_dir}")
```

```
In [73]: out = cv2.VideoWriter(output_path, fourcc, fps, (frame_width, frame_height))
In [74]: if not out.isOpened():
             raise IOError(f"Could not open the output video file: {output_path}")
In [75]: while video.isOpened():
             ret, frame = video.read()
             if not ret:
                 break
             # Run prediction on the frame
             results = model.predict(frame)
             # Process results
             boxes = results[0].boxes.xyxy.cpu().numpy() # Extract bounding boxes
             scores = results[0].boxes.conf.cpu().numpy() # Extract confidence scores
             labels = results[0].boxes.cls.cpu().numpy() # Extract class IDs
             names = model.names # Access the class names from the model
             # Draw boxes and labels on the frame
             for box, score, label in zip(boxes, scores, labels):
                 x1, y1, x2, y2 = map(int, box)
                 label_name = names[int(label)]
                 cv2.rectangle(frame, (x1, y1), (x2, y2), (0, 255, 0), 2)
                 text = f"{label_name}: {score:.2f}"
                 cv2.putText(frame, text, (x1, y1 - 10), cv2.FONT_HERSHEY_SIMPLEX, 0.5, (0, 255,
             # Write the frame to the output video
             out.write(frame)
         0: 384x640 16 players, 49.3ms
         Speed: 3.0ms preprocess, 49.3ms inference, 1.7ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 14 players, 48.9ms
         Speed: 3.9ms preprocess, 48.9ms inference, 2.4ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 15 players, 48.9ms
         Speed: 1.8ms preprocess, 48.9ms inference, 1.5ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 16 players, 41.2ms
         Speed: 1.8ms preprocess, 41.2ms inference, 1.5ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 15 players, 44.8ms
         Speed: 2.7ms preprocess, 44.8ms inference, 2.4ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 20 players, 38.1ms
         Speed: 1.8ms preprocess, 38.1ms inference, 1.8ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 8 players, 35.4ms
         Speed: 1.8ms preprocess, 35.4ms inference, 1.5ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 14 players, 35.4ms
         Speed: 1.9ms preprocess, 35.4ms inference, 1.6ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 12 players, 31.8ms
         Speed: 2.0ms preprocess, 31.8ms inference, 1.4ms postprocess per image at shape (1, 3, 3
         84, 640)
```

```
0: 384x640 1 football, 9 players, 36.5ms
Speed: 2.0ms preprocess, 36.5ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 9 players, 37.5ms
Speed: 1.8ms preprocess, 37.5ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 12 players, 28.1ms
Speed: 2.6ms preprocess, 28.1ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 11 players, 25.0ms
Speed: 1.7ms preprocess, 25.0ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 9 players, 26.0ms
Speed: 1.8ms preprocess, 26.0ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 10 players, 26.4ms
Speed: 1.8ms preprocess, 26.4ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 10 players, 26.8ms
Speed: 1.8ms preprocess, 26.8ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 6 players, 26.1ms
Speed: 1.8ms preprocess, 26.1ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 26.5ms
Speed: 1.8ms preprocess, 26.5ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 2 footballs, 7 players, 28.6ms
Speed: 1.7ms preprocess, 28.6ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 8 players, 33.4ms
Speed: 1.7ms preprocess, 33.4ms inference, 2.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 3 footballs, 7 players, 30.3ms
Speed: 1.8ms preprocess, 30.3ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 2 footballs, 6 players, 31.4ms
Speed: 2.2ms preprocess, 31.4ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 3 players, 43.3ms
Speed: 1.9ms preprocess, 43.3ms inference, 3.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 3 players, 47.2ms
Speed: 1.9ms preprocess, 47.2ms inference, 2.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 5 players, 37.4ms
Speed: 3.6ms preprocess, 37.4ms inference, 1.9ms postprocess per image at shape (1, 3, 3
```

0: 384x640 5 players, 34.8ms

```
Speed: 1.7ms preprocess, 34.8ms inference, 2.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 5 players, 35.4ms
Speed: 1.8ms preprocess, 35.4ms inference, 4.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 10 players, 38.2ms
Speed: 1.8ms preprocess, 38.2ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 2 footballs, 3 players, 35.2ms
Speed: 1.9ms preprocess, 35.2ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 2 footballs, 3 players, 33.1ms
Speed: 2.0ms preprocess, 33.1ms inference, 1.8ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 7 players, 35.2ms
Speed: 2.0ms preprocess, 35.2ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 2 players, 31.5ms
Speed: 1.9ms preprocess, 31.5ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 3 players, 24.5ms
Speed: 1.8ms preprocess, 24.5ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 5 players, 25.1ms
Speed: 1.7ms preprocess, 25.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 2 footballs, 5 players, 24.2ms
Speed: 1.5ms preprocess, 24.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 11 players, 25.2ms
Speed: 2.2ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 6 players, 26.8ms
Speed: 1.6ms preprocess, 26.8ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 25.9ms
Speed: 4.6ms preprocess, 25.9ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 10 players, 25.9ms
Speed: 1.9ms preprocess, 25.9ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 30.3ms
Speed: 1.9ms preprocess, 30.3ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.6ms
Speed: 1.8ms preprocess, 25.6ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
```

Speed: 2.1ms preprocess, 24.8ms inference, 1.0ms postprocess per image at shape (1, 3, 3

0: 384x640 16 players, 24.8ms

```
0: 384x640 13 players, 25.0ms
Speed: 1.7ms preprocess, 25.0ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.4ms
Speed: 1.7ms preprocess, 25.4ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 25.2ms
Speed: 1.6ms preprocess, 25.2ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 24.7ms
Speed: 4.6ms preprocess, 24.7ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 24.7ms
Speed: 1.9ms preprocess, 24.7ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 24.8ms
Speed: 2.4ms preprocess, 24.8ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 24.8ms
Speed: 1.7ms preprocess, 24.8ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 24.4ms
Speed: 1.4ms preprocess, 24.4ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 25.2ms
Speed: 1.6ms preprocess, 25.2ms inference, 2.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.2ms
Speed: 2.2ms preprocess, 25.2ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 24.4ms
Speed: 1.6ms preprocess, 24.4ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.5ms
Speed: 2.4ms preprocess, 25.5ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 25.1ms
Speed: 1.5ms preprocess, 25.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.4ms
Speed: 2.4ms preprocess, 25.4ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 25.1ms
Speed: 1.4ms preprocess, 25.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 24.8ms
Speed: 2.2ms preprocess, 24.8ms inference, 1.2ms postprocess per image at shape (1, 3, 3
```

0: 384x640 15 players, 25.1ms

```
Speed: 1.9ms preprocess, 25.1ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 26.3ms
Speed: 2.7ms preprocess, 26.3ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 25.3ms
Speed: 2.0ms preprocess, 25.3ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.1ms
Speed: 2.1ms preprocess, 25.1ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 27.1ms
Speed: 2.3ms preprocess, 27.1ms inference, 1.8ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 24.6ms
Speed: 1.7ms preprocess, 24.6ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 27.2ms
Speed: 1.7ms preprocess, 27.2ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 24.6ms
Speed: 1.6ms preprocess, 24.6ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 24.2ms
Speed: 2.2ms preprocess, 24.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 25.2ms
Speed: 1.9ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.6ms
Speed: 1.5ms preprocess, 25.6ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 24.5ms
Speed: 1.7ms preprocess, 24.5ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.7ms
Speed: 1.8ms preprocess, 25.7ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.5ms
Speed: 2.3ms preprocess, 25.5ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 25.6ms
Speed: 2.3ms preprocess, 25.6ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.0ms
Speed: 2.3ms preprocess, 25.0ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
```

Speed: 2.4ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3

0: 384x640 15 players, 25.2ms

```
0: 384x640 15 players, 25.2ms
Speed: 2.1ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.3ms
Speed: 2.1ms preprocess, 25.3ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 25.3ms
Speed: 1.9ms preprocess, 25.3ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 24.6ms
Speed: 2.1ms preprocess, 24.6ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 25.5ms
Speed: 2.5ms preprocess, 25.5ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 36.0ms
Speed: 1.8ms preprocess, 36.0ms inference, 1.8ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 23.9ms
Speed: 2.7ms preprocess, 23.9ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 27.2ms
Speed: 1.9ms preprocess, 27.2ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 24.6ms
Speed: 4.5ms preprocess, 24.6ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 28.0ms
Speed: 5.8ms preprocess, 28.0ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 26.3ms
Speed: 1.5ms preprocess, 26.3ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 24.6ms
Speed: 2.5ms preprocess, 24.6ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.0ms
Speed: 1.7ms preprocess, 25.0ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.3ms
Speed: 1.5ms preprocess, 25.3ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 25.8ms
Speed: 2.0ms preprocess, 25.8ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 30.3ms
Speed: 1.5ms preprocess, 30.3ms inference, 1.3ms postprocess per image at shape (1, 3, 3
```

0: 384x640 16 players, 24.4ms

```
Speed: 2.1ms preprocess, 24.4ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.3ms
Speed: 2.3ms preprocess, 25.3ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.2ms
Speed: 2.3ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.2ms
Speed: 1.9ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 24.7ms
Speed: 1.9ms preprocess, 24.7ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.5ms
Speed: 2.3ms preprocess, 25.5ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 10 players, 25.2ms
Speed: 1.7ms preprocess, 25.2ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.3ms
Speed: 1.5ms preprocess, 25.3ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 25.6ms
Speed: 1.9ms preprocess, 25.6ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 10 players, 26.1ms
Speed: 1.7ms preprocess, 26.1ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.4ms
Speed: 2.8ms preprocess, 25.4ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 25.2ms
Speed: 2.2ms preprocess, 25.2ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.9ms
Speed: 2.0ms preprocess, 25.9ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.3ms
Speed: 1.7ms preprocess, 25.3ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 10 players, 25.1ms
Speed: 2.6ms preprocess, 25.1ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 10 players, 24.7ms
Speed: 1.8ms preprocess, 24.7ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
```

Speed: 1.8ms preprocess, 25.6ms inference, 1.0ms postprocess per image at shape (1, 3, 3

0: 384x640 10 players, 25.6ms

```
0: 384x640 12 players, 25.4ms
Speed: 1.6ms preprocess, 25.4ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 25.0ms
Speed: 2.2ms preprocess, 25.0ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 24.8ms
Speed: 1.6ms preprocess, 24.8ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 25.6ms
Speed: 1.5ms preprocess, 25.6ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 10 players, 25.8ms
Speed: 1.8ms preprocess, 25.8ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 24.5ms
Speed: 1.8ms preprocess, 24.5ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 25.0ms
Speed: 1.6ms preprocess, 25.0ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.4ms
Speed: 2.0ms preprocess, 25.4ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 10 players, 25.6ms
Speed: 2.6ms preprocess, 25.6ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 24.4ms
Speed: 2.5ms preprocess, 24.4ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 25.1ms
Speed: 1.6ms preprocess, 25.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.3ms
Speed: 1.5ms preprocess, 25.3ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.1ms
Speed: 2.3ms preprocess, 25.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 10 players, 24.4ms
Speed: 2.3ms preprocess, 24.4ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 29.0ms
Speed: 1.9ms preprocess, 29.0ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 26.1ms
Speed: 1.8ms preprocess, 26.1ms inference, 1.5ms postprocess per image at shape (1, 3, 3
```

0: 384x640 9 players, 25.4ms

```
Speed: 1.9ms preprocess, 25.4ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 9 players, 25.1ms
Speed: 3.5ms preprocess, 25.1ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 9 players, 26.2ms
Speed: 1.9ms preprocess, 26.2ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 26.9ms
Speed: 2.3ms preprocess, 26.9ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 26.9ms
Speed: 1.9ms preprocess, 26.9ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 24.7ms
Speed: 1.9ms preprocess, 24.7ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 25.2ms
Speed: 1.9ms preprocess, 25.2ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 10 players, 25.7ms
Speed: 2.0ms preprocess, 25.7ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 25.1ms
Speed: 2.2ms preprocess, 25.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 24.5ms
Speed: 2.6ms preprocess, 24.5ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 25.5ms
Speed: 2.1ms preprocess, 25.5ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 24.9ms
Speed: 1.9ms preprocess, 24.9ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 25.2ms
Speed: 1.9ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 26.0ms
Speed: 1.9ms preprocess, 26.0ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.7ms
Speed: 1.8ms preprocess, 25.7ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 25.8ms
Speed: 1.8ms preprocess, 25.8ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
```

Speed: 1.8ms preprocess, 25.5ms inference, 1.1ms postprocess per image at shape (1, 3, 3

0: 384x640 12 players, 25.5ms

```
0: 384x640 13 players, 24.6ms
Speed: 2.2ms preprocess, 24.6ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.2ms
Speed: 1.7ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 31.5ms
Speed: 1.6ms preprocess, 31.5ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 25.8ms
Speed: 1.9ms preprocess, 25.8ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 25.3ms
Speed: 5.1ms preprocess, 25.3ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 24.5ms
Speed: 3.1ms preprocess, 24.5ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 29.7ms
Speed: 1.7ms preprocess, 29.7ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.4ms
Speed: 2.1ms preprocess, 25.4ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.4ms
Speed: 2.7ms preprocess, 25.4ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 24.5ms
Speed: 1.9ms preprocess, 24.5ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.2ms
Speed: 1.6ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 25.8ms
Speed: 1.9ms preprocess, 25.8ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 24.6ms
Speed: 1.6ms preprocess, 24.6ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.2ms
Speed: 2.6ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 25.6ms
Speed: 1.8ms preprocess, 25.6ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 28.2ms
Speed: 1.5ms preprocess, 28.2ms inference, 1.1ms postprocess per image at shape (1, 3, 3
```

0: 384x640 17 players, 24.8ms

```
Speed: 1.8ms preprocess, 24.8ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.8ms
Speed: 1.8ms preprocess, 25.8ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.7ms
Speed: 1.6ms preprocess, 25.7ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 24.4ms
Speed: 1.6ms preprocess, 24.4ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 25.2ms
Speed: 1.5ms preprocess, 25.2ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 25.5ms
Speed: 1.8ms preprocess, 25.5ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.4ms
Speed: 1.8ms preprocess, 25.4ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 25.9ms
Speed: 1.8ms preprocess, 25.9ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.5ms
Speed: 2.0ms preprocess, 25.5ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 25.8ms
Speed: 1.8ms preprocess, 25.8ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 30.4ms
Speed: 3.1ms preprocess, 30.4ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 24.0ms
Speed: 3.0ms preprocess, 24.0ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 24.0ms
Speed: 4.0ms preprocess, 24.0ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 26.9ms
Speed: 2.1ms preprocess, 26.9ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 24.2ms
Speed: 3.6ms preprocess, 24.2ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 15 players, 25.3ms
Speed: 1.8ms preprocess, 25.3ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
```

Speed: 1.8ms preprocess, 25.5ms inference, 1.1ms postprocess per image at shape (1, 3, 3

0: 384x640 1 football, 13 players, 25.5ms

```
0: 384x640 16 players, 25.0ms
Speed: 1.6ms preprocess, 25.0ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 24.4ms
Speed: 1.7ms preprocess, 24.4ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 25.5ms
Speed: 1.7ms preprocess, 25.5ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 25.1ms
Speed: 1.4ms preprocess, 25.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 27.1ms
Speed: 2.6ms preprocess, 27.1ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 16 players, 24.7ms
Speed: 1.7ms preprocess, 24.7ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 16 players, 25.5ms
Speed: 1.8ms preprocess, 25.5ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 25.2ms
Speed: 1.8ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 25.2ms
Speed: 1.9ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 25.8ms
Speed: 2.3ms preprocess, 25.8ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 25.1ms
Speed: 2.0ms preprocess, 25.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 24.8ms
Speed: 2.1ms preprocess, 24.8ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 28.9ms
Speed: 2.0ms preprocess, 28.9ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 27.0ms
Speed: 1.9ms preprocess, 27.0ms inference, 3.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.3ms
Speed: 3.5ms preprocess, 25.3ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 26.8ms
Speed: 2.0ms preprocess, 26.8ms inference, 1.2ms postprocess per image at shape (1, 3, 3
```

0: 384x640 14 players, 24.9ms

```
Speed: 1.8ms preprocess, 24.9ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 24.4ms
Speed: 1.8ms preprocess, 24.4ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 25.8ms
Speed: 1.9ms preprocess, 25.8ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 25.1ms
Speed: 1.7ms preprocess, 25.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 25.2ms
Speed: 1.7ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.5ms
Speed: 1.5ms preprocess, 25.5ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.7ms
Speed: 1.9ms preprocess, 25.7ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 25.3ms
Speed: 1.9ms preprocess, 25.3ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 25.8ms
Speed: 1.8ms preprocess, 25.8ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 23 players, 26.0ms
Speed: 1.8ms preprocess, 26.0ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 20 players, 24.1ms
Speed: 1.8ms preprocess, 24.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 20 players, 25.5ms
Speed: 1.8ms preprocess, 25.5ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 25.8ms
Speed: 2.4ms preprocess, 25.8ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.1ms
Speed: 2.4ms preprocess, 25.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 14 players, 25.1ms
Speed: 1.6ms preprocess, 25.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 15 players, 25.7ms
Speed: 1.8ms preprocess, 25.7ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
```

Speed: 1.7ms preprocess, 25.7ms inference, 1.5ms postprocess per image at shape (1, 3, 3

0: 384x640 1 football, 9 players, 25.7ms

```
0: 384x640 11 players, 25.1ms
Speed: 3.0ms preprocess, 25.1ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.0ms
Speed: 1.8ms preprocess, 25.0ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.1ms
Speed: 2.8ms preprocess, 25.1ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 26.8ms
Speed: 2.7ms preprocess, 26.8ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 11 players, 25.4ms
Speed: 3.9ms preprocess, 25.4ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 12 players, 26.1ms
Speed: 1.9ms preprocess, 26.1ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.4ms
Speed: 1.8ms preprocess, 25.4ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 24.9ms
Speed: 1.8ms preprocess, 24.9ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 25.7ms
Speed: 1.9ms preprocess, 25.7ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 25.3ms
Speed: 2.3ms preprocess, 25.3ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 25.0ms
Speed: 1.9ms preprocess, 25.0ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 25.7ms
Speed: 1.9ms preprocess, 25.7ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.3ms
Speed: 1.7ms preprocess, 25.3ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 25.2ms
Speed: 2.1ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 30.2ms
Speed: 4.2ms preprocess, 30.2ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 24.5ms
Speed: 2.2ms preprocess, 24.5ms inference, 1.3ms postprocess per image at shape (1, 3, 3
```

0: 384x640 14 players, 24.0ms

```
Speed: 1.6ms preprocess, 24.0ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.2ms
Speed: 2.4ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 26.1ms
Speed: 2.1ms preprocess, 26.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.1ms
Speed: 2.0ms preprocess, 25.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 30.7ms
Speed: 2.1ms preprocess, 30.7ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 25.3ms
Speed: 2.7ms preprocess, 25.3ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 26.0ms
Speed: 1.8ms preprocess, 26.0ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 28.2ms
Speed: 2.0ms preprocess, 28.2ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 26.7ms
Speed: 2.1ms preprocess, 26.7ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 26.0ms
Speed: 1.7ms preprocess, 26.0ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.1ms
Speed: 1.8ms preprocess, 25.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 24.8ms
Speed: 1.7ms preprocess, 24.8ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.3ms
Speed: 1.6ms preprocess, 25.3ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 10 players, 25.6ms
Speed: 1.9ms preprocess, 25.6ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 24.9ms
Speed: 2.0ms preprocess, 24.9ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 25.0ms
Speed: 1.7ms preprocess, 25.0ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
```

Speed: 1.9ms preprocess, 25.4ms inference, 1.1ms postprocess per image at shape (1, 3, 3

0: 384x640 16 players, 25.4ms

```
0: 384x640 16 players, 26.0ms
Speed: 1.8ms preprocess, 26.0ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 25.4ms
Speed: 1.8ms preprocess, 25.4ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 25.6ms
Speed: 3.3ms preprocess, 25.6ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.7ms
Speed: 4.2ms preprocess, 25.7ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 27.1ms
Speed: 1.9ms preprocess, 27.1ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 10 players, 27.4ms
Speed: 1.8ms preprocess, 27.4ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 9 players, 27.8ms
Speed: 1.9ms preprocess, 27.8ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 10 players, 31.7ms
Speed: 1.9ms preprocess, 31.7ms inference, 2.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 9 players, 35.1ms
Speed: 1.9ms preprocess, 35.1ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 32.9ms
Speed: 1.9ms preprocess, 32.9ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 34.6ms
Speed: 1.8ms preprocess, 34.6ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 9 players, 38.9ms
Speed: 2.8ms preprocess, 38.9ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 36.6ms
Speed: 1.9ms preprocess, 36.6ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 36.8ms
Speed: 1.9ms preprocess, 36.8ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 30.6ms
Speed: 1.8ms preprocess, 30.6ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 24.4ms
Speed: 1.8ms preprocess, 24.4ms inference, 1.3ms postprocess per image at shape (1, 3, 3
```

0: 384x640 11 players, 24.4ms

```
Speed: 1.7ms preprocess, 24.4ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 24.7ms
Speed: 1.9ms preprocess, 24.7ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 27.0ms
Speed: 1.7ms preprocess, 27.0ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 25.2ms
Speed: 1.8ms preprocess, 25.2ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 10 players, 28.7ms
Speed: 1.8ms preprocess, 28.7ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 8 players, 30.6ms
Speed: 2.0ms preprocess, 30.6ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 23.9ms
Speed: 1.8ms preprocess, 23.9ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 24.3ms
Speed: 1.8ms preprocess, 24.3ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 27.5ms
Speed: 1.6ms preprocess, 27.5ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 33.6ms
Speed: 1.8ms preprocess, 33.6ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 31.7ms
Speed: 1.9ms preprocess, 31.7ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 31.7ms
Speed: 1.8ms preprocess, 31.7ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 8 players, 30.3ms
Speed: 1.9ms preprocess, 30.3ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 8 players, 27.1ms
Speed: 1.9ms preprocess, 27.1ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 10 players, 33.3ms
Speed: 2.1ms preprocess, 33.3ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 12 players, 24.5ms
Speed: 1.9ms preprocess, 24.5ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
```

Speed: 1.9ms preprocess, 27.1ms inference, 1.3ms postprocess per image at shape (1, 3, 3

0: 384x640 12 players, 27.1ms

```
0: 384x640 12 players, 26.8ms
Speed: 1.7ms preprocess, 26.8ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 25.0ms
Speed: 1.7ms preprocess, 25.0ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.2ms
Speed: 1.7ms preprocess, 25.2ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 9 players, 24.6ms
Speed: 1.7ms preprocess, 24.6ms inference, 2.8ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.6ms
Speed: 1.8ms preprocess, 25.6ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 19 players, 31.2ms
Speed: 1.9ms preprocess, 31.2ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.3ms
Speed: 1.8ms preprocess, 25.3ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 31.9ms
Speed: 1.8ms preprocess, 31.9ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 35.1ms
Speed: 1.8ms preprocess, 35.1ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 11 players, 28.0ms
Speed: 2.1ms preprocess, 28.0ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.6ms
Speed: 1.8ms preprocess, 25.6ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 30.4ms
Speed: 2.9ms preprocess, 30.4ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 48.6ms
Speed: 3.0ms preprocess, 48.6ms inference, 2.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 31.6ms
Speed: 6.9ms preprocess, 31.6ms inference, 2.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 33.4ms
Speed: 2.0ms preprocess, 33.4ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 29.5ms
Speed: 1.8ms preprocess, 29.5ms inference, 1.6ms postprocess per image at shape (1, 3, 3
```

84, 640)

0: 384x640 15 players, 32.5ms

```
Speed: 2.1ms preprocess, 32.5ms inference, 1.9ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 28.8ms
Speed: 1.8ms preprocess, 28.8ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 27.0ms
Speed: 1.7ms preprocess, 27.0ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 10 players, 27.1ms
Speed: 1.8ms preprocess, 27.1ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 26.4ms
Speed: 1.8ms preprocess, 26.4ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 26.4ms
Speed: 1.8ms preprocess, 26.4ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 26.5ms
Speed: 1.8ms preprocess, 26.5ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 29.8ms
Speed: 1.9ms preprocess, 29.8ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 32.9ms
Speed: 1.7ms preprocess, 32.9ms inference, 2.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 11 players, 26.0ms
Speed: 2.4ms preprocess, 26.0ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 12 players, 28.8ms
Speed: 1.7ms preprocess, 28.8ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 30.3ms
Speed: 1.9ms preprocess, 30.3ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 41.3ms
Speed: 3.1ms preprocess, 41.3ms inference, 2.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 33.7ms
Speed: 2.0ms preprocess, 33.7ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 46.1ms
Speed: 2.4ms preprocess, 46.1ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 26.4ms
Speed: 1.8ms preprocess, 26.4ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
```

Speed: 1.7ms preprocess, 26.3ms inference, 1.4ms postprocess per image at shape (1, 3, 3

0: 384x640 16 players, 26.3ms

84, 640)

```
0: 384x640 12 players, 33.7ms
Speed: 2.6ms preprocess, 33.7ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 25.9ms
Speed: 2.1ms preprocess, 25.9ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 26.7ms
Speed: 1.8ms preprocess, 26.7ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 28.0ms
Speed: 3.1ms preprocess, 28.0ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 27.9ms
Speed: 1.8ms preprocess, 27.9ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 14 players, 26.5ms
Speed: 2.0ms preprocess, 26.5ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 10 players, 26.5ms
Speed: 1.9ms preprocess, 26.5ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 11 players, 26.5ms
Speed: 1.9ms preprocess, 26.5ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 26.3ms
Speed: 1.7ms preprocess, 26.3ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 31.9ms
Speed: 1.8ms preprocess, 31.9ms inference, 3.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 36.0ms
Speed: 4.2ms preprocess, 36.0ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 33.4ms
Speed: 1.8ms preprocess, 33.4ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 26.8ms
Speed: 1.8ms preprocess, 26.8ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 33.9ms
Speed: 2.0ms preprocess, 33.9ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 14 players, 34.1ms
Speed: 1.9ms preprocess, 34.1ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 9 players, 35.2ms
Speed: 2.0ms preprocess, 35.2ms inference, 1.7ms postprocess per image at shape (1, 3, 3
```

84, 640)

0: 384x640 1 football, 11 players, 31.5ms

```
Speed: 1.8ms preprocess, 31.5ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 9 players, 35.0ms
Speed: 2.0ms preprocess, 35.0ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 27.9ms
Speed: 1.8ms preprocess, 27.9ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 26.5ms
Speed: 1.7ms preprocess, 26.5ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 27.9ms
Speed: 1.7ms preprocess, 27.9ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 26.1ms
Speed: 1.8ms preprocess, 26.1ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 26.1ms
Speed: 1.8ms preprocess, 26.1ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 25.8ms
Speed: 1.8ms preprocess, 25.8ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 27.8ms
Speed: 1.7ms preprocess, 27.8ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 30.5ms
Speed: 1.9ms preprocess, 30.5ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 15 players, 25.5ms
Speed: 3.4ms preprocess, 25.5ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 12 players, 27.1ms
Speed: 1.8ms preprocess, 27.1ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 44.1ms
Speed: 4.0ms preprocess, 44.1ms inference, 1.8ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 34.0ms
Speed: 1.9ms preprocess, 34.0ms inference, 1.8ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 38.0ms
Speed: 4.0ms preprocess, 38.0ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 13 players, 32.8ms
Speed: 5.5ms preprocess, 32.8ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
```

Speed: 2.0ms preprocess, 30.9ms inference, 1.4ms postprocess per image at shape (1, 3, 3

0: 384x640 17 players, 30.9ms

84, 640)

```
0: 384x640 1 football, 13 players, 26.0ms
Speed: 3.4ms preprocess, 26.0ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 12 players, 34.8ms
Speed: 1.8ms preprocess, 34.8ms inference, 1.9ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 27.6ms
Speed: 2.0ms preprocess, 27.6ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 25.9ms
Speed: 3.5ms preprocess, 25.9ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 14 players, 26.8ms
Speed: 2.0ms preprocess, 26.8ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 15 players, 28.6ms
Speed: 1.8ms preprocess, 28.6ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 16 players, 26.3ms
Speed: 3.4ms preprocess, 26.3ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 25.9ms
Speed: 3.5ms preprocess, 25.9ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 27.4ms
Speed: 3.3ms preprocess, 27.4ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 29.2ms
Speed: 2.1ms preprocess, 29.2ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 27.3ms
Speed: 1.8ms preprocess, 27.3ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 19 players, 33.6ms
Speed: 2.3ms preprocess, 33.6ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 17 players, 52.9ms
Speed: 5.9ms preprocess, 52.9ms inference, 3.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 20 players, 45.7ms
Speed: 4.1ms preprocess, 45.7ms inference, 1.8ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 23 players, 39.5ms
Speed: 2.2ms preprocess, 39.5ms inference, 2.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 19 players, 35.1ms
Speed: 2.3ms preprocess, 35.1ms inference, 1.5ms postprocess per image at shape (1, 3, 3
```

84, 640)

0: 384x640 19 players, 30.6ms

```
Speed: 4.7ms preprocess, 30.6ms inference, 1.7ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 34.4ms
Speed: 1.8ms preprocess, 34.4ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 19 players, 27.8ms
Speed: 1.7ms preprocess, 27.8ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 18 players, 28.4ms
Speed: 1.7ms preprocess, 28.4ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 20 players, 27.0ms
Speed: 1.8ms preprocess, 27.0ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 21 players, 27.6ms
Speed: 2.0ms preprocess, 27.6ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 11 players, 26.4ms
Speed: 1.8ms preprocess, 26.4ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 2 footballs, 18 players, 25.7ms
Speed: 2.1ms preprocess, 25.7ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 16 players, 26.4ms
Speed: 2.0ms preprocess, 26.4ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 30.5ms
Speed: 1.7ms preprocess, 30.5ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 18 players, 31.1ms
Speed: 3.8ms preprocess, 31.1ms inference, 2.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 13 players, 32.1ms
Speed: 1.9ms preprocess, 32.1ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 36.1ms
Speed: 2.0ms preprocess, 36.1ms inference, 1.9ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 35.0ms
Speed: 1.8ms preprocess, 35.0ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 26.9ms
Speed: 1.8ms preprocess, 26.9ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 27.1ms
Speed: 1.9ms preprocess, 27.1ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
```

Speed: 1.7ms preprocess, 31.5ms inference, 1.4ms postprocess per image at shape (1, 3, 3

0: 384x640 1 football, 16 players, 31.5ms

84, 640)

```
0: 384x640 2 footballs, 13 players, 36.7ms
Speed: 1.7ms preprocess, 36.7ms inference, 2.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 17 players, 27.3ms
Speed: 1.8ms preprocess, 27.3ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 20 players, 25.8ms
Speed: 1.8ms preprocess, 25.8ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 19 players, 28.8ms
Speed: 1.9ms preprocess, 28.8ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 28.8ms
Speed: 1.8ms preprocess, 28.8ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 18 players, 27.0ms
Speed: 2.1ms preprocess, 27.0ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 17 players, 27.6ms
Speed: 2.1ms preprocess, 27.6ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 18 players, 27.4ms
Speed: 2.0ms preprocess, 27.4ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 18 players, 32.7ms
Speed: 1.8ms preprocess, 32.7ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 15 players, 44.0ms
Speed: 2.1ms preprocess, 44.0ms inference, 3.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 19 players, 57.5ms
Speed: 1.9ms preprocess, 57.5ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 25.4ms
Speed: 1.9ms preprocess, 25.4ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 20 players, 25.5ms
Speed: 1.7ms preprocess, 25.5ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 31.6ms
Speed: 1.9ms preprocess, 31.6ms inference, 1.6ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 20 players, 25.2ms
Speed: 1.8ms preprocess, 25.2ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 20 players, 24.8ms
Speed: 1.9ms preprocess, 24.8ms inference, 1.2ms postprocess per image at shape (1, 3, 3
```

84, 640)

0: 384x640 1 football, 20 players, 26.6ms

```
Speed: 1.8ms preprocess, 26.6ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 16 players, 25.8ms
Speed: 1.7ms preprocess, 25.8ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 15 players, 24.9ms
Speed: 1.7ms preprocess, 24.9ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 25.6ms
Speed: 1.8ms preprocess, 25.6ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 21 players, 25.4ms
Speed: 3.4ms preprocess, 25.4ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 20 players, 24.7ms
Speed: 1.8ms preprocess, 24.7ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 26.1ms
Speed: 2.6ms preprocess, 26.1ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 28.0ms
Speed: 2.3ms preprocess, 28.0ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 27.4ms
Speed: 1.5ms preprocess, 27.4ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 26.0ms
Speed: 2.2ms preprocess, 26.0ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 15 players, 24.8ms
Speed: 1.5ms preprocess, 24.8ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 26.5ms
Speed: 1.7ms preprocess, 26.5ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 24.9ms
Speed: 1.6ms preprocess, 24.9ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 25.7ms
Speed: 1.9ms preprocess, 25.7ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 20 players, 24.9ms
Speed: 3.5ms preprocess, 24.9ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 19 players, 25.8ms
Speed: 4.3ms preprocess, 25.8ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
```

Speed: 3.1ms preprocess, 25.1ms inference, 1.3ms postprocess per image at shape (1, 3, 3

0: 384x640 1 football, 19 players, 25.1ms

84, 640)

```
0: 384x640 1 football, 19 players, 25.6ms
Speed: 2.1ms preprocess, 25.6ms inference, 1.5ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 19 players, 24.7ms
Speed: 2.0ms preprocess, 24.7ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 25.1ms
Speed: 1.8ms preprocess, 25.1ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 24.7ms
Speed: 3.3ms preprocess, 24.7ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 25.9ms
Speed: 1.9ms preprocess, 25.9ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 21 players, 24.5ms
Speed: 1.7ms preprocess, 24.5ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 18 players, 25.7ms
Speed: 3.4ms preprocess, 25.7ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 25.2ms
Speed: 1.7ms preprocess, 25.2ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 24.7ms
Speed: 1.5ms preprocess, 24.7ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 1 football, 20 players, 26.0ms
Speed: 1.7ms preprocess, 26.0ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 19 players, 24.4ms
Speed: 1.7ms preprocess, 24.4ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 16 players, 25.2ms
Speed: 2.7ms preprocess, 25.2ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 19 players, 24.4ms
Speed: 1.8ms preprocess, 24.4ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 20 players, 26.0ms
Speed: 1.9ms preprocess, 26.0ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 21 players, 25.8ms
Speed: 2.0ms preprocess, 25.8ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 20 players, 28.8ms
Speed: 1.9ms preprocess, 28.8ms inference, 1.5ms postprocess per image at shape (1, 3, 3
```

84, 640)

0: 384x640 20 players, 26.4ms

```
Speed: 1.8ms preprocess, 26.4ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 22 players, 26.5ms
Speed: 1.9ms preprocess, 26.5ms inference, 1.4ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 18 players, 24.5ms
Speed: 3.5ms preprocess, 24.5ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 19 players, 27.0ms
Speed: 1.6ms preprocess, 27.0ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 20 players, 27.3ms
Speed: 1.8ms preprocess, 27.3ms inference, 2.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 17 players, 31.0ms
Speed: 1.9ms preprocess, 31.0ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 20 players, 24.6ms
Speed: 2.0ms preprocess, 24.6ms inference, 1.3ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 19 players, 26.1ms
Speed: 2.1ms preprocess, 26.1ms inference, 1.2ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 22 players, 25.8ms
Speed: 1.9ms preprocess, 25.8ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 20 players, 25.2ms
Speed: 2.0ms preprocess, 25.2ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 21 players, 25.6ms
Speed: 1.8ms preprocess, 25.6ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 21 players, 24.7ms
Speed: 1.8ms preprocess, 24.7ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 22 players, 25.5ms
Speed: 2.1ms preprocess, 25.5ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 23 players, 25.6ms
Speed: 2.0ms preprocess, 25.6ms inference, 1.0ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 23 players, 24.7ms
Speed: 1.6ms preprocess, 24.7ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
0: 384x640 20 players, 25.8ms
Speed: 1.9ms preprocess, 25.8ms inference, 1.1ms postprocess per image at shape (1, 3, 3
84, 640)
```

Speed: 2.1ms preprocess, 24.9ms inference, 1.0ms postprocess per image at shape (1, 3, 3

0: 384x640 19 players, 24.9ms

84, 640)

```
0: 384x640 19 players, 25.7ms
         Speed: 1.7ms preprocess, 25.7ms inference, 1.1ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 20 players, 26.4ms
         Speed: 1.7ms preprocess, 26.4ms inference, 1.0ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 20 players, 25.4ms
         Speed: 1.9ms preprocess, 25.4ms inference, 1.3ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 1 football, 21 players, 32.6ms
         Speed: 1.9ms preprocess, 32.6ms inference, 1.4ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 21 players, 27.1ms
         Speed: 3.6ms preprocess, 27.1ms inference, 1.4ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 19 players, 25.7ms
         Speed: 5.4ms preprocess, 25.7ms inference, 1.3ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 18 players, 34.5ms
         Speed: 2.0ms preprocess, 34.5ms inference, 1.4ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 18 players, 29.7ms
         Speed: 2.0ms preprocess, 29.7ms inference, 1.4ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 20 players, 28.5ms
         Speed: 2.0ms preprocess, 28.5ms inference, 1.6ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 19 players, 24.9ms
         Speed: 1.8ms preprocess, 24.9ms inference, 1.1ms postprocess per image at shape (1, 3, 3
         84, 640)
         0: 384x640 18 players, 26.1ms
         Speed: 1.9ms preprocess, 26.1ms inference, 1.1ms postprocess per image at shape (1, 3, 3
         84, 640)
         video.release()
In [76]:
         out.release()
In [77]: print(f"Video saved at: {output_path}")
         Video saved at: /content/output_video.mp4
```

test new video

```
In [87]: video_path = "/content/videoplayback.mp4"
    video = cv2.VideoCapture(video_path)

In [88]: frame_width = int(video.get(cv2.CAP_PROP_FRAME_WIDTH))
    frame_height = int(video.get(cv2.CAP_PROP_FRAME_HEIGHT))
    fps = int(video.get(cv2.CAP_PROP_FPS))

In [89]: output_dir = "/content/"
```

```
output_path = os.path.join(output_dir, "output_video2.mp4")
In [90]: | fourcc = cv2.VideoWriter_fourcc(*'mp4v')
         out = cv2.VideoWriter(output_path, fourcc, fps, (frame_width, frame_height))
In [91]: while video.isOpened():
             ret, frame = video.read()
             if not ret:
                 break
             # Run prediction on the frame
             results = model.predict(frame)
             # Process results
             boxes = results[0].boxes.xyxy.cpu().numpy() # Extract bounding boxes
             scores = results[0].boxes.conf.cpu().numpy() # Extract confidence scores
             labels = results[0].boxes.cls.cpu().numpy() # Extract class IDs
             names = model.names # Access the class names from the model
             # Draw boxes and labels on the frame
             for box, score, label in zip(boxes, scores, labels):
                 x1, y1, x2, y2 = map(int, box)
                 label_name = names[int(label)]
                 cv2.rectangle(frame, (x1, y1), (x2, y2), (0, 255, 0), 2)
                 text = f"{label_name}: {score:.2f}"
                 cv2.putText(frame, text, (x1, y1 - 10), cv2.FONT_HERSHEY_SIMPLEX, 0.5, (0, 255,
             # Write the frame to the output video
             out.write(frame)
         0: 640x384 3 players, 119.0ms
         Speed: 1.7ms preprocess, 119.0ms inference, 1.6ms postprocess per image at shape (1, 3,
         640, 384)
         0: 640x384 2 players, 48.9ms
         Speed: 1.6ms preprocess, 48.9ms inference, 1.0ms postprocess per image at shape (1, 3, 6
         40, 384)
         0: 640x384 2 players, 41.8ms
         Speed: 1.9ms preprocess, 41.8ms inference, 1.0ms postprocess per image at shape (1, 3, 6
         40, 384)
         0: 640x384 2 players, 36.4ms
         Speed: 1.2ms preprocess, 36.4ms inference, 1.0ms postprocess per image at shape (1, 3, 6
         40, 384)
         0: 640x384 3 players, 36.4ms
         Speed: 1.5ms preprocess, 36.4ms inference, 1.1ms postprocess per image at shape (1, 3, 6
         40, 384)
         0: 640x384 1 football, 2 players, 36.6ms
         Speed: 1.7ms preprocess, 36.6ms inference, 1.1ms postprocess per image at shape (1, 3, 6
         40, 384)
         0: 640x384 1 football, 3 players, 32.2ms
         Speed: 1.2ms preprocess, 32.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
         40, 384)
         0: 640x384 1 football, 2 players, 25.3ms
         Speed: 1.2ms preprocess, 25.3ms inference, 0.9ms postprocess per image at shape (1, 3, 6
         40, 384)
         0: 640x384 1 football, 4 players, 27.0ms
         Speed: 1.3ms preprocess, 27.0ms inference, 1.4ms postprocess per image at shape (1, 3, 6
         40, 384)
```

```
0: 640x384 3 players, 27.8ms
Speed: 1.4ms preprocess, 27.8ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 4 players, 27.3ms
Speed: 1.2ms preprocess, 27.3ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 footballs, 4 players, 27.7ms
Speed: 1.5ms preprocess, 27.7ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 4 players, 28.0ms
Speed: 1.4ms preprocess, 28.0ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 5 players, 26.1ms
Speed: 1.2ms preprocess, 26.1ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 26.4ms
Speed: 2.0ms preprocess, 26.4ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 31.5ms
Speed: 1.2ms preprocess, 31.5ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.1ms
Speed: 2.1ms preprocess, 27.1ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 26.8ms
Speed: 1.1ms preprocess, 26.8ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 6 players, 26.6ms
Speed: 1.9ms preprocess, 26.6ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 6 players, 27.8ms
Speed: 1.2ms preprocess, 27.8ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 4 players, 26.8ms
Speed: 1.3ms preprocess, 26.8ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 4 players, 27.0ms
Speed: 1.1ms preprocess, 27.0ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 7 players, 27.9ms
Speed: 1.6ms preprocess, 27.9ms inference, 1.7ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 9 players, 27.1ms
Speed: 1.7ms preprocess, 27.1ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 6 players, 28.1ms
Speed: 1.2ms preprocess, 28.1ms inference, 1.4ms postprocess per image at shape (1, 3, 6
```

0: 640x384 8 players, 27.8ms

```
Speed: 2.4ms preprocess, 27.8ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 footballs, 10 players, 26.8ms
Speed: 1.2ms preprocess, 26.8ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 9 players, 27.8ms
Speed: 1.6ms preprocess, 27.8ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 9 players, 28.2ms
Speed: 1.1ms preprocess, 28.2ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.8ms
Speed: 1.4ms preprocess, 27.8ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 28.6ms
Speed: 1.3ms preprocess, 28.6ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 11 players, 28.1ms
Speed: 1.4ms preprocess, 28.1ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 8 players, 27.8ms
Speed: 1.3ms preprocess, 27.8ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 7 players, 26.1ms
Speed: 2.8ms preprocess, 26.1ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 8 players, 27.5ms
Speed: 1.4ms preprocess, 27.5ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 7 players, 28.0ms
Speed: 1.3ms preprocess, 28.0ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 26.8ms
Speed: 1.3ms preprocess, 26.8ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 8 players, 27.3ms
Speed: 1.3ms preprocess, 27.3ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 9 players, 27.8ms
Speed: 2.5ms preprocess, 27.8ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 11 players, 26.2ms
Speed: 1.4ms preprocess, 26.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 11 players, 30.2ms
Speed: 1.2ms preprocess, 30.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
```

Speed: 2.1ms preprocess, 29.4ms inference, 1.2ms postprocess per image at shape (1, 3, 6

0: 640x384 11 players, 29.4ms

```
0: 640x384 11 players, 26.4ms
Speed: 1.9ms preprocess, 26.4ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 26.1ms
Speed: 1.5ms preprocess, 26.1ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 11 players, 25.9ms
Speed: 1.3ms preprocess, 25.9ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 26.3ms
Speed: 1.3ms preprocess, 26.3ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 10 players, 27.1ms
Speed: 1.2ms preprocess, 27.1ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 11 players, 27.4ms
Speed: 1.3ms preprocess, 27.4ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 9 players, 27.6ms
Speed: 1.2ms preprocess, 27.6ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 9 players, 27.7ms
Speed: 1.2ms preprocess, 27.7ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 10 players, 26.2ms
Speed: 1.1ms preprocess, 26.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 26.0ms
Speed: 1.2ms preprocess, 26.0ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 12 players, 27.2ms
Speed: 1.1ms preprocess, 27.2ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 9 players, 26.5ms
Speed: 1.2ms preprocess, 26.5ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 11 players, 27.5ms
Speed: 1.1ms preprocess, 27.5ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 10 players, 27.6ms
Speed: 1.1ms preprocess, 27.6ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 11 players, 27.1ms
Speed: 1.4ms preprocess, 27.1ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 26.1ms
```

Speed: 1.3ms preprocess, 26.1ms inference, 2.3ms postprocess per image at shape (1, 3, 6

40, 384)

0: 640x384 11 players, 27.6ms

```
Speed: 1.5ms preprocess, 27.6ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 27.4ms
Speed: 1.3ms preprocess, 27.4ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 27.6ms
Speed: 1.1ms preprocess, 27.6ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 28.1ms
Speed: 1.0ms preprocess, 28.1ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 11 players, 26.7ms
Speed: 2.7ms preprocess, 26.7ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 26.5ms
Speed: 1.1ms preprocess, 26.5ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 26.8ms
Speed: 1.8ms preprocess, 26.8ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 26.7ms
Speed: 1.1ms preprocess, 26.7ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 27.0ms
Speed: 1.6ms preprocess, 27.0ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 26.1ms
Speed: 1.1ms preprocess, 26.1ms inference, 2.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 26.2ms
Speed: 1.2ms preprocess, 26.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 17 players, 26.8ms
Speed: 1.2ms preprocess, 26.8ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 28.4ms
Speed: 1.2ms preprocess, 28.4ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 28.4ms
Speed: 1.1ms preprocess, 28.4ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 27.9ms
Speed: 1.5ms preprocess, 27.9ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 27.8ms
Speed: 1.1ms preprocess, 27.8ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 27.7ms
```

Speed: 1.2ms preprocess, 27.7ms inference, 1.5ms postprocess per image at shape (1, 3, 6

```
0: 640x384 16 players, 28.6ms
Speed: 1.3ms preprocess, 28.6ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 25.8ms
Speed: 1.2ms preprocess, 25.8ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 26.4ms
Speed: 1.3ms preprocess, 26.4ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 27.1ms
Speed: 1.3ms preprocess, 27.1ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 26.7ms
Speed: 1.1ms preprocess, 26.7ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 26.7ms
Speed: 1.1ms preprocess, 26.7ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 26.5ms
Speed: 1.1ms preprocess, 26.5ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 15 players, 27.1ms
Speed: 1.2ms preprocess, 27.1ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 27.3ms
Speed: 1.3ms preprocess, 27.3ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 27.4ms
Speed: 1.1ms preprocess, 27.4ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 27.2ms
Speed: 1.4ms preprocess, 27.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 27.6ms
Speed: 1.4ms preprocess, 27.6ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 26.9ms
Speed: 1.2ms preprocess, 26.9ms inference, 1.8ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 26.5ms
Speed: 1.2ms preprocess, 26.5ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 26.6ms
Speed: 1.9ms preprocess, 26.6ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 26.1ms
Speed: 1.2ms preprocess, 26.1ms inference, 1.5ms postprocess per image at shape (1, 3, 6
```

0: 640x384 16 players, 27.2ms

```
Speed: 1.2ms preprocess, 27.2ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 26.9ms
Speed: 1.2ms preprocess, 26.9ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 26.8ms
Speed: 1.5ms preprocess, 26.8ms inference, 3.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 31.3ms
Speed: 1.4ms preprocess, 31.3ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 28.4ms
Speed: 1.2ms preprocess, 28.4ms inference, 1.7ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 28.0ms
Speed: 2.9ms preprocess, 28.0ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 27.6ms
Speed: 1.2ms preprocess, 27.6ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 25.9ms
Speed: 1.6ms preprocess, 25.9ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 31.1ms
Speed: 2.6ms preprocess, 31.1ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 38.1ms
Speed: 1.2ms preprocess, 38.1ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 36.3ms
Speed: 1.3ms preprocess, 36.3ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 30.3ms
Speed: 1.2ms preprocess, 30.3ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 29.2ms
Speed: 1.1ms preprocess, 29.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 25.8ms
Speed: 1.5ms preprocess, 25.8ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 28.1ms
Speed: 1.2ms preprocess, 28.1ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 26.6ms
Speed: 1.2ms preprocess, 26.6ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
```

Speed: 1.2ms preprocess, 26.3ms inference, 1.6ms postprocess per image at shape (1, 3, 6

0: 640x384 12 players, 26.3ms

```
0: 640x384 12 players, 32.4ms
Speed: 1.4ms preprocess, 32.4ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 25.9ms
Speed: 1.3ms preprocess, 25.9ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 31.9ms
Speed: 1.3ms preprocess, 31.9ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 17 players, 32.1ms
Speed: 1.4ms preprocess, 32.1ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 32.3ms
Speed: 1.5ms preprocess, 32.3ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 35.3ms
Speed: 2.0ms preprocess, 35.3ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 33.2ms
Speed: 1.4ms preprocess, 33.2ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 25.6ms
Speed: 1.2ms preprocess, 25.6ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 26.3ms
Speed: 1.1ms preprocess, 26.3ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 27.0ms
Speed: 1.7ms preprocess, 27.0ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 11 players, 26.8ms
Speed: 1.1ms preprocess, 26.8ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 26.7ms
Speed: 1.0ms preprocess, 26.7ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 17 players, 25.9ms
Speed: 1.0ms preprocess, 25.9ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 26.4ms
Speed: 1.0ms preprocess, 26.4ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 29.1ms
Speed: 1.1ms preprocess, 29.1ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 25.8ms
Speed: 1.1ms preprocess, 25.8ms inference, 1.2ms postprocess per image at shape (1, 3, 6
```

0: 640x384 14 players, 26.6ms

```
Speed: 1.1ms preprocess, 26.6ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 26.7ms
Speed: 1.1ms preprocess, 26.7ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 27.0ms
Speed: 1.1ms preprocess, 27.0ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 17 players, 27.1ms
Speed: 1.1ms preprocess, 27.1ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 27.1ms
Speed: 1.1ms preprocess, 27.1ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 18 players, 27.3ms
Speed: 1.1ms preprocess, 27.3ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 37.1ms
Speed: 1.1ms preprocess, 37.1ms inference, 1.7ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 32.1ms
Speed: 1.4ms preprocess, 32.1ms inference, 3.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 36.5ms
Speed: 1.2ms preprocess, 36.5ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 36.1ms
Speed: 1.5ms preprocess, 36.1ms inference, 1.7ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 30.1ms
Speed: 1.1ms preprocess, 30.1ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 17 players, 28.7ms
Speed: 1.6ms preprocess, 28.7ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 18 players, 29.5ms
Speed: 1.3ms preprocess, 29.5ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 17 players, 29.3ms
Speed: 1.4ms preprocess, 29.3ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 28.9ms
Speed: 2.0ms preprocess, 28.9ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 17 players, 34.7ms
Speed: 1.5ms preprocess, 34.7ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 17 players, 29.3ms
```

Speed: 1.2ms preprocess, 29.3ms inference, 1.5ms postprocess per image at shape (1, 3, 6

```
0: 640x384 16 players, 25.4ms
Speed: 1.1ms preprocess, 25.4ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 17 players, 29.9ms
Speed: 1.1ms preprocess, 29.9ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 25.9ms
Speed: 1.3ms preprocess, 25.9ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 20 players, 29.1ms
Speed: 1.1ms preprocess, 29.1ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 19 players, 31.5ms
Speed: 1.2ms preprocess, 31.5ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 30.4ms
Speed: 1.2ms preprocess, 30.4ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 28.7ms
Speed: 1.1ms preprocess, 28.7ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 19 players, 27.4ms
Speed: 1.1ms preprocess, 27.4ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 21 players, 27.1ms
Speed: 1.1ms preprocess, 27.1ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 17 players, 27.0ms
Speed: 1.1ms preprocess, 27.0ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 29.9ms
Speed: 1.1ms preprocess, 29.9ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 34.8ms
Speed: 1.1ms preprocess, 34.8ms inference, 3.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 36.7ms
Speed: 1.1ms preprocess, 36.7ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 38.4ms
Speed: 1.1ms preprocess, 38.4ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 33.9ms
Speed: 1.1ms preprocess, 33.9ms inference, 1.8ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 38.8ms
```

Speed: 1.5ms preprocess, 38.8ms inference, 3.0ms postprocess per image at shape (1, 3, 6

40, 384)

0: 640x384 15 players, 47.3ms

```
Speed: 1.1ms preprocess, 47.3ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 27.8ms
Speed: 1.6ms preprocess, 27.8ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 26.3ms
Speed: 1.3ms preprocess, 26.3ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 26.3ms
Speed: 1.1ms preprocess, 26.3ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 29.9ms
Speed: 3.0ms preprocess, 29.9ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 27.8ms
Speed: 1.2ms preprocess, 27.8ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 25.5ms
Speed: 1.4ms preprocess, 25.5ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 17 players, 27.1ms
Speed: 1.3ms preprocess, 27.1ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 27.8ms
Speed: 1.3ms preprocess, 27.8ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 17 players, 28.3ms
Speed: 1.3ms preprocess, 28.3ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 18 players, 31.6ms
Speed: 1.2ms preprocess, 31.6ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 17 players, 32.0ms
Speed: 1.3ms preprocess, 32.0ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 27.3ms
Speed: 1.3ms preprocess, 27.3ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 16 players, 26.4ms
Speed: 1.4ms preprocess, 26.4ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 28.0ms
Speed: 1.2ms preprocess, 28.0ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 29.7ms
Speed: 1.3ms preprocess, 29.7ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
```

Speed: 1.3ms preprocess, 30.6ms inference, 1.2ms postprocess per image at shape (1, 3, 6

0: 640x384 14 players, 30.6ms

```
0: 640x384 13 players, 27.4ms
Speed: 1.3ms preprocess, 27.4ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 32.3ms
Speed: 1.3ms preprocess, 32.3ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 10 players, 31.8ms
Speed: 1.1ms preprocess, 31.8ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 33.6ms
Speed: 1.1ms preprocess, 33.6ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 34.5ms
Speed: 1.3ms preprocess, 34.5ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 13 players, 30.5ms
Speed: 1.1ms preprocess, 30.5ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 41.7ms
Speed: 1.2ms preprocess, 41.7ms inference, 2.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 15 players, 32.9ms
Speed: 1.6ms preprocess, 32.9ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 30.1ms
Speed: 1.2ms preprocess, 30.1ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 27.2ms
Speed: 1.1ms preprocess, 27.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 26.4ms
Speed: 2.7ms preprocess, 26.4ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 28.1ms
Speed: 1.2ms preprocess, 28.1ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 28.2ms
Speed: 1.2ms preprocess, 28.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 11 players, 27.7ms
Speed: 1.1ms preprocess, 27.7ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 28.1ms
Speed: 1.1ms preprocess, 28.1ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 28.3ms
Speed: 1.1ms preprocess, 28.3ms inference, 1.3ms postprocess per image at shape (1, 3, 6
```

0: 640x384 18 players, 34.2ms

```
Speed: 1.1ms preprocess, 34.2ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 35.8ms
Speed: 1.1ms preprocess, 35.8ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 25.5ms
Speed: 1.1ms preprocess, 25.5ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 35.2ms
Speed: 1.1ms preprocess, 35.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 29.8ms
Speed: 1.1ms preprocess, 29.8ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 38.5ms
Speed: 2.8ms preprocess, 38.5ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 35.0ms
Speed: 1.9ms preprocess, 35.0ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 10 players, 44.7ms
Speed: 1.9ms preprocess, 44.7ms inference, 5.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 10 players, 41.8ms
Speed: 2.0ms preprocess, 41.8ms inference, 2.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 10 players, 37.7ms
Speed: 1.8ms preprocess, 37.7ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 34.8ms
Speed: 1.1ms preprocess, 34.8ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 11 players, 46.6ms
Speed: 1.1ms preprocess, 46.6ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 10 players, 27.9ms
Speed: 1.2ms preprocess, 27.9ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 26.8ms
Speed: 1.2ms preprocess, 26.8ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 28.8ms
Speed: 1.1ms preprocess, 28.8ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 28.2ms
Speed: 1.1ms preprocess, 28.2ms inference, 1.8ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 10 players, 26.5ms
```

Speed: 1.1ms preprocess, 26.5ms inference, 1.3ms postprocess per image at shape (1, 3, 6

```
0: 640x384 11 players, 27.0ms
Speed: 1.1ms preprocess, 27.0ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 27.7ms
Speed: 1.1ms preprocess, 27.7ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 28.6ms
Speed: 1.1ms preprocess, 28.6ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 27.5ms
Speed: 1.1ms preprocess, 27.5ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 27.9ms
Speed: 1.1ms preprocess, 27.9ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 11 players, 31.2ms
Speed: 1.1ms preprocess, 31.2ms inference, 3.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 13 players, 25.3ms
Speed: 1.1ms preprocess, 25.3ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 9 players, 42.7ms
Speed: 1.1ms preprocess, 42.7ms inference, 2.8ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 37.9ms
Speed: 1.1ms preprocess, 37.9ms inference, 1.7ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 12 players, 38.5ms
Speed: 6.5ms preprocess, 38.5ms inference, 1.7ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 8 players, 32.1ms
Speed: 2.8ms preprocess, 32.1ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 8 players, 30.5ms
Speed: 1.6ms preprocess, 30.5ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 10 players, 32.7ms
Speed: 1.3ms preprocess, 32.7ms inference, 2.8ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 14 players, 29.4ms
Speed: 1.2ms preprocess, 29.4ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 11 players, 29.3ms
Speed: 1.3ms preprocess, 29.3ms inference, 1.7ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 9 players, 34.2ms
Speed: 1.3ms preprocess, 34.2ms inference, 1.5ms postprocess per image at shape (1, 3, 6
```

0: 640x384 9 players, 31.1ms

```
Speed: 1.3ms preprocess, 31.1ms inference, 1.7ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 8 players, 31.1ms
Speed: 1.2ms preprocess, 31.1ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 10 players, 37.2ms
Speed: 1.2ms preprocess, 37.2ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 9 players, 36.4ms
Speed: 1.2ms preprocess, 36.4ms inference, 2.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 9 players, 30.8ms
Speed: 1.2ms preprocess, 30.8ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 7 players, 25.7ms
Speed: 1.1ms preprocess, 25.7ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 8 players, 27.5ms
Speed: 1.2ms preprocess, 27.5ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 7 players, 28.1ms
Speed: 1.1ms preprocess, 28.1ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 28.1ms
Speed: 1.1ms preprocess, 28.1ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 28.1ms
Speed: 1.1ms preprocess, 28.1ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 28.1ms
Speed: 1.2ms preprocess, 28.1ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 28.2ms
Speed: 1.1ms preprocess, 28.2ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 29.6ms
Speed: 1.1ms preprocess, 29.6ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 26.4ms
Speed: 1.9ms preprocess, 26.4ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.2ms
Speed: 1.1ms preprocess, 27.2ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.2ms
Speed: 1.2ms preprocess, 27.2ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
```

Speed: 1.2ms preprocess, 27.5ms inference, 1.2ms postprocess per image at shape (1, 3, 6

0: 640x384 1 player, 27.5ms

```
0: 640x384 4 players, 27.1ms
Speed: 1.2ms preprocess, 27.1ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.1ms
Speed: 1.2ms preprocess, 27.1ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 28.3ms
Speed: 1.2ms preprocess, 28.3ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.6ms
Speed: 2.3ms preprocess, 27.6ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 26.8ms
Speed: 2.5ms preprocess, 26.8ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 28.4ms
Speed: 1.1ms preprocess, 28.4ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.9ms
Speed: 1.5ms preprocess, 27.9ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 28.1ms
Speed: 1.4ms preprocess, 28.1ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.9ms
Speed: 1.5ms preprocess, 27.9ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 28.0ms
Speed: 1.5ms preprocess, 28.0ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 29.0ms
Speed: 1.4ms preprocess, 29.0ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 28.3ms
Speed: 1.2ms preprocess, 28.3ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 2 players, 28.5ms
Speed: 1.1ms preprocess, 28.5ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 28.5ms
Speed: 1.1ms preprocess, 28.5ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 28.5ms
Speed: 1.1ms preprocess, 28.5ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 28.6ms
Speed: 1.3ms preprocess, 28.6ms inference, 1.1ms postprocess per image at shape (1, 3, 6
```

0: 640x384 2 players, 28.8ms

```
Speed: 1.2ms preprocess, 28.8ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 28.6ms
Speed: 1.3ms preprocess, 28.6ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 2 players, 28.8ms
Speed: 1.2ms preprocess, 28.8ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.7ms
Speed: 1.1ms preprocess, 27.7ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 28.4ms
Speed: 1.1ms preprocess, 28.4ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.3ms
Speed: 1.7ms preprocess, 27.3ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 26.8ms
Speed: 1.9ms preprocess, 26.8ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.3ms
Speed: 1.1ms preprocess, 27.3ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.2ms
Speed: 1.9ms preprocess, 27.2ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.7ms
Speed: 1.6ms preprocess, 27.7ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.2ms
Speed: 1.4ms preprocess, 27.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 29.0ms
Speed: 1.3ms preprocess, 29.0ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.1ms
Speed: 2.2ms preprocess, 27.1ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.0ms
Speed: 1.2ms preprocess, 27.0ms inference, 2.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.2ms
Speed: 1.3ms preprocess, 27.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.1ms
Speed: 1.1ms preprocess, 27.1ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.2ms
```

Speed: 1.1ms preprocess, 27.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6

```
0: 640x384 5 players, 27.6ms
Speed: 2.0ms preprocess, 27.6ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.1ms
Speed: 1.1ms preprocess, 27.1ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 28.3ms
Speed: 1.1ms preprocess, 28.3ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.3ms
Speed: 1.4ms preprocess, 27.3ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.6ms
Speed: 1.2ms preprocess, 27.6ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.7ms
Speed: 1.2ms preprocess, 27.7ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.7ms
Speed: 1.2ms preprocess, 27.7ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 28.2ms
Speed: 1.2ms preprocess, 28.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 28.2ms
Speed: 1.1ms preprocess, 28.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 28.1ms
Speed: 1.1ms preprocess, 28.1ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.8ms
Speed: 1.5ms preprocess, 27.8ms inference, 1.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 28.5ms
Speed: 1.2ms preprocess, 28.5ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 28.7ms
Speed: 1.3ms preprocess, 28.7ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.1ms
Speed: 1.2ms preprocess, 27.1ms inference, 1.8ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 26.9ms
Speed: 1.4ms preprocess, 26.9ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 28.1ms
Speed: 1.2ms preprocess, 28.1ms inference, 1.5ms postprocess per image at shape (1, 3, 6
```

0: 640x384 3 players, 27.0ms

```
Speed: 3.2ms preprocess, 27.0ms inference, 1.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 39.2ms
Speed: 1.1ms preprocess, 39.2ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 32.1ms
Speed: 1.3ms preprocess, 32.1ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.6ms
Speed: 2.6ms preprocess, 27.6ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.6ms
Speed: 1.4ms preprocess, 27.6ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 28.4ms
Speed: 1.2ms preprocess, 28.4ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 28.2ms
Speed: 1.3ms preprocess, 28.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 28.2ms
Speed: 1.2ms preprocess, 28.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 29.0ms
Speed: 1.4ms preprocess, 29.0ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 4 players, 28.3ms
Speed: 1.3ms preprocess, 28.3ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 28.0ms
Speed: 1.3ms preprocess, 28.0ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 28.1ms
Speed: 1.3ms preprocess, 28.1ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.9ms
Speed: 1.4ms preprocess, 27.9ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.4ms
Speed: 1.2ms preprocess, 27.4ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.7ms
Speed: 1.1ms preprocess, 27.7ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 28.4ms
Speed: 1.2ms preprocess, 28.4ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
```

Speed: 1.4ms preprocess, 27.7ms inference, 1.1ms postprocess per image at shape (1, 3, 6

0: 640x384 4 players, 27.7ms

```
0: 640x384 5 players, 28.0ms
Speed: 1.1ms preprocess, 28.0ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.4ms
Speed: 1.4ms preprocess, 27.4ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 33.5ms
Speed: 1.3ms preprocess, 33.5ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 26.7ms
Speed: 1.3ms preprocess, 26.7ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 28.0ms
Speed: 1.3ms preprocess, 28.0ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 28.1ms
Speed: 1.3ms preprocess, 28.1ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.8ms
Speed: 1.9ms preprocess, 27.8ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.6ms
Speed: 1.2ms preprocess, 27.6ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.2ms
Speed: 1.3ms preprocess, 27.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 26.6ms
Speed: 1.2ms preprocess, 26.6ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.2ms
Speed: 1.9ms preprocess, 27.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.3ms
Speed: 1.2ms preprocess, 27.3ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.2ms
Speed: 1.4ms preprocess, 27.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.2ms
Speed: 1.6ms preprocess, 27.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 28.0ms
Speed: 1.4ms preprocess, 28.0ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 28.0ms
Speed: 1.1ms preprocess, 28.0ms inference, 1.0ms postprocess per image at shape (1, 3, 6
```

0: 640x384 3 players, 28.3ms

```
Speed: 1.2ms preprocess, 28.3ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.7ms
Speed: 1.2ms preprocess, 27.7ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.8ms
Speed: 1.2ms preprocess, 27.8ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.7ms
Speed: 1.7ms preprocess, 27.7ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 5 players, 27.3ms
Speed: 1.4ms preprocess, 27.3ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.7ms
Speed: 2.0ms preprocess, 27.7ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 4 players, 28.0ms
Speed: 1.1ms preprocess, 28.0ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 4 players, 28.2ms
Speed: 1.3ms preprocess, 28.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.7ms
Speed: 1.1ms preprocess, 27.7ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 1 player, 28.2ms
Speed: 1.1ms preprocess, 28.2ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.9ms
Speed: 1.2ms preprocess, 27.9ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 35.8ms
Speed: 1.2ms preprocess, 35.8ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 football, 5 players, 25.6ms
Speed: 3.4ms preprocess, 25.6ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 26.4ms
Speed: 1.2ms preprocess, 26.4ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 26.5ms
Speed: 1.1ms preprocess, 26.5ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.9ms
Speed: 1.4ms preprocess, 27.9ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
```

Speed: 1.2ms preprocess, 28.5ms inference, 1.2ms postprocess per image at shape (1, 3, 6

0: 640x384 6 players, 28.5ms

```
0: 640x384 7 players, 27.2ms
Speed: 1.3ms preprocess, 27.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.2ms
Speed: 1.2ms preprocess, 27.2ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.2ms
Speed: 1.5ms preprocess, 27.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.1ms
Speed: 1.1ms preprocess, 27.1ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.6ms
Speed: 1.2ms preprocess, 27.6ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.5ms
Speed: 1.2ms preprocess, 27.5ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.2ms
Speed: 1.2ms preprocess, 27.2ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.1ms
Speed: 1.1ms preprocess, 27.1ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.6ms
Speed: 1.2ms preprocess, 27.6ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 7 players, 27.2ms
Speed: 1.2ms preprocess, 27.2ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.7ms
Speed: 1.1ms preprocess, 27.7ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.3ms
Speed: 1.1ms preprocess, 27.3ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 7 players, 27.2ms
Speed: 1.1ms preprocess, 27.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.3ms
Speed: 1.1ms preprocess, 27.3ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.3ms
Speed: 1.4ms preprocess, 27.3ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.6ms
Speed: 1.8ms preprocess, 27.6ms inference, 0.9ms postprocess per image at shape (1, 3, 6
```

0: 640x384 6 players, 27.7ms

```
Speed: 1.1ms preprocess, 27.7ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.2ms
Speed: 1.4ms preprocess, 27.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 7 players, 27.1ms
Speed: 1.2ms preprocess, 27.1ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 7 players, 35.7ms
Speed: 1.2ms preprocess, 35.7ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 25.2ms
Speed: 1.2ms preprocess, 25.2ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.9ms
Speed: 1.1ms preprocess, 27.9ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.8ms
Speed: 1.2ms preprocess, 27.8ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.3ms
Speed: 1.2ms preprocess, 27.3ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 7 players, 27.4ms
Speed: 1.3ms preprocess, 27.4ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.3ms
Speed: 1.2ms preprocess, 27.3ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.6ms
Speed: 1.8ms preprocess, 27.6ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.7ms
Speed: 1.2ms preprocess, 27.7ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.1ms
Speed: 1.2ms preprocess, 27.1ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.2ms
Speed: 1.2ms preprocess, 27.2ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.5ms
Speed: 1.1ms preprocess, 27.5ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.7ms
Speed: 1.7ms preprocess, 27.7ms inference, 1.7ms postprocess per image at shape (1, 3, 6
40, 384)
```

Speed: 1.6ms preprocess, 27.7ms inference, 1.1ms postprocess per image at shape (1, 3, 6

0: 640x384 6 players, 27.7ms

```
0: 640x384 5 players, 27.2ms
Speed: 2.1ms preprocess, 27.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.2ms
Speed: 1.2ms preprocess, 27.2ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.5ms
Speed: 2.2ms preprocess, 27.5ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.1ms
Speed: 1.3ms preprocess, 27.1ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.1ms
Speed: 1.2ms preprocess, 27.1ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 26.6ms
Speed: 1.9ms preprocess, 26.6ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.2ms
Speed: 1.2ms preprocess, 27.2ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.2ms
Speed: 1.2ms preprocess, 27.2ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.2ms
Speed: 1.8ms preprocess, 27.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.0ms
Speed: 1.4ms preprocess, 27.0ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 26.9ms
Speed: 2.3ms preprocess, 26.9ms inference, 4.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 31.1ms
Speed: 1.2ms preprocess, 31.1ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 28.4ms
Speed: 1.2ms preprocess, 28.4ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 26.1ms
Speed: 1.2ms preprocess, 26.1ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 28.7ms
Speed: 1.4ms preprocess, 28.7ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 27.8ms
Speed: 1.5ms preprocess, 27.8ms inference, 1.2ms postprocess per image at shape (1, 3, 6
```

0: 640x384 5 players, 27.1ms

```
Speed: 1.3ms preprocess, 27.1ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 7 players, 27.5ms
Speed: 1.3ms preprocess, 27.5ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 7 players, 27.4ms
Speed: 1.5ms preprocess, 27.4ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 27.8ms
Speed: 1.2ms preprocess, 27.8ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 28.5ms
Speed: 1.1ms preprocess, 28.5ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 28.4ms
Speed: 1.9ms preprocess, 28.4ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 28.4ms
Speed: 1.2ms preprocess, 28.4ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 7 players, 28.3ms
Speed: 1.1ms preprocess, 28.3ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 29.1ms
Speed: 1.8ms preprocess, 29.1ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 28.9ms
Speed: 1.1ms preprocess, 28.9ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 29.3ms
Speed: 1.1ms preprocess, 29.3ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 6 players, 28.7ms
Speed: 1.1ms preprocess, 28.7ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 29.0ms
Speed: 1.1ms preprocess, 29.0ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 28.3ms
Speed: 1.5ms preprocess, 28.3ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 28.1ms
Speed: 1.1ms preprocess, 28.1ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 28.7ms
Speed: 1.4ms preprocess, 28.7ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
```

Speed: 1.1ms preprocess, 27.8ms inference, 1.2ms postprocess per image at shape (1, 3, 6

0: 640x384 4 players, 27.8ms

```
0: 640x384 4 players, 27.4ms
Speed: 1.4ms preprocess, 27.4ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 28.0ms
Speed: 1.3ms preprocess, 28.0ms inference, 1.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.0ms
Speed: 1.2ms preprocess, 27.0ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 34.4ms
Speed: 1.8ms preprocess, 34.4ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 26.5ms
Speed: 1.2ms preprocess, 26.5ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 28.0ms
Speed: 1.2ms preprocess, 28.0ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 5 players, 28.5ms
Speed: 1.1ms preprocess, 28.5ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 28.2ms
Speed: 1.1ms preprocess, 28.2ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 28.2ms
Speed: 1.1ms preprocess, 28.2ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 26.7ms
Speed: 1.1ms preprocess, 26.7ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.5ms
Speed: 1.2ms preprocess, 27.5ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.4ms
Speed: 1.1ms preprocess, 27.4ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.3ms
Speed: 1.5ms preprocess, 27.3ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.3ms
Speed: 2.0ms preprocess, 27.3ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.3ms
Speed: 1.9ms preprocess, 27.3ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.3ms
Speed: 1.5ms preprocess, 27.3ms inference, 1.2ms postprocess per image at shape (1, 3, 6
```

0: 640x384 2 players, 27.3ms

```
Speed: 1.1ms preprocess, 27.3ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 27.7ms
Speed: 1.1ms preprocess, 27.7ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.7ms
Speed: 1.1ms preprocess, 27.7ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.3ms
Speed: 1.2ms preprocess, 27.3ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.6ms
Speed: 1.1ms preprocess, 27.6ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 28.3ms
Speed: 1.1ms preprocess, 28.3ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 28.3ms
Speed: 1.1ms preprocess, 28.3ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 28.3ms
Speed: 1.1ms preprocess, 28.3ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 26.8ms
Speed: 2.0ms preprocess, 26.8ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 29.9ms
Speed: 1.7ms preprocess, 29.9ms inference, 1.7ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.4ms
Speed: 1.6ms preprocess, 27.4ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.4ms
Speed: 1.8ms preprocess, 27.4ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 28.0ms
Speed: 1.1ms preprocess, 28.0ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.1ms
Speed: 2.1ms preprocess, 27.1ms inference, 2.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.3ms
Speed: 1.2ms preprocess, 27.3ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.0ms
Speed: 1.2ms preprocess, 27.0ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
```

Speed: 1.2ms preprocess, 26.8ms inference, 1.3ms postprocess per image at shape (1, 3, 6

0: 640x384 2 players, 26.8ms

```
0: 640x384 1 player, 27.1ms
Speed: 1.4ms preprocess, 27.1ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.2ms
Speed: 1.2ms preprocess, 27.2ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 27.7ms
Speed: 1.1ms preprocess, 27.7ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.3ms
Speed: 1.1ms preprocess, 27.3ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 27.7ms
Speed: 1.8ms preprocess, 27.7ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.6ms
Speed: 1.1ms preprocess, 27.6ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.8ms
Speed: 1.3ms preprocess, 27.8ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 4 players, 27.2ms
Speed: 1.3ms preprocess, 27.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.2ms
Speed: 1.1ms preprocess, 27.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.7ms
Speed: 1.2ms preprocess, 27.7ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.3ms
Speed: 1.1ms preprocess, 27.3ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.3ms
Speed: 1.3ms preprocess, 27.3ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.6ms
Speed: 1.2ms preprocess, 27.6ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.3ms
Speed: 1.1ms preprocess, 27.3ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 29.2ms
Speed: 1.1ms preprocess, 29.2ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.9ms
Speed: 1.2ms preprocess, 27.9ms inference, 1.2ms postprocess per image at shape (1, 3, 6
```

0: 640x384 4 players, 27.2ms

```
Speed: 1.6ms preprocess, 27.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 27.0ms
Speed: 1.3ms preprocess, 27.0ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.2ms
Speed: 1.1ms preprocess, 27.2ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 27.5ms
Speed: 1.6ms preprocess, 27.5ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 28.0ms
Speed: 1.2ms preprocess, 28.0ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 28.6ms
Speed: 1.3ms preprocess, 28.6ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 28.5ms
Speed: 1.8ms preprocess, 28.5ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 28.2ms
Speed: 1.2ms preprocess, 28.2ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 27.8ms
Speed: 1.4ms preprocess, 27.8ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 27.8ms
Speed: 2.0ms preprocess, 27.8ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 27.7ms
Speed: 1.6ms preprocess, 27.7ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 28.2ms
Speed: 1.1ms preprocess, 28.2ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 28.1ms
Speed: 1.1ms preprocess, 28.1ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 27.8ms
Speed: 1.7ms preprocess, 27.8ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 26.9ms
Speed: 1.2ms preprocess, 26.9ms inference, 1.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 32.0ms
Speed: 1.5ms preprocess, 32.0ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
```

Speed: 1.2ms preprocess, 35.7ms inference, 1.5ms postprocess per image at shape (1, 3, 6

0: 640x384 1 player, 35.7ms

```
0: 640x384 1 player, 25.9ms
Speed: 1.3ms preprocess, 25.9ms inference, 1.8ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 29.1ms
Speed: 1.1ms preprocess, 29.1ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 25.5ms
Speed: 1.2ms preprocess, 25.5ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 26.6ms
Speed: 1.0ms preprocess, 26.6ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 2 players, 39.5ms
Speed: 1.1ms preprocess, 39.5ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 44.1ms
Speed: 1.1ms preprocess, 44.1ms inference, 1.7ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 42.1ms
Speed: 3.4ms preprocess, 42.1ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 33.9ms
Speed: 1.2ms preprocess, 33.9ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 40.7ms
Speed: 1.6ms preprocess, 40.7ms inference, 2.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 3 players, 43.2ms
Speed: 1.5ms preprocess, 43.2ms inference, 1.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 31.9ms
Speed: 1.3ms preprocess, 31.9ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 28.0ms
Speed: 1.4ms preprocess, 28.0ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 1 player, 27.1ms
Speed: 1.1ms preprocess, 27.1ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 29.2ms
Speed: 1.2ms preprocess, 29.2ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.3ms
Speed: 1.1ms preprocess, 27.3ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.4ms
Speed: 1.3ms preprocess, 27.4ms inference, 1.1ms postprocess per image at shape (1, 3, 6
```

0: 640x384 (no detections), 27.4ms

```
Speed: 1.2ms preprocess, 27.4ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.3ms
Speed: 1.7ms preprocess, 27.3ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.1ms
Speed: 4.0ms preprocess, 27.1ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 30.7ms
Speed: 1.2ms preprocess, 30.7ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.4ms
Speed: 1.2ms preprocess, 27.4ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.0ms
Speed: 1.2ms preprocess, 27.0ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.2ms
Speed: 1.0ms preprocess, 27.2ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 26.4ms
Speed: 1.2ms preprocess, 26.4ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.3ms
Speed: 1.1ms preprocess, 27.3ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 26.3ms
Speed: 1.1ms preprocess, 26.3ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 30.2ms
Speed: 4.1ms preprocess, 30.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 33.8ms
Speed: 1.4ms preprocess, 33.8ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 37.6ms
Speed: 1.7ms preprocess, 37.6ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 35.4ms
Speed: 1.1ms preprocess, 35.4ms inference, 1.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 35.1ms
Speed: 1.0ms preprocess, 35.1ms inference, 2.0ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 28.6ms
Speed: 1.1ms preprocess, 28.6ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
```

Speed: 1.4ms preprocess, 27.9ms inference, 1.1ms postprocess per image at shape (1, 3, 6

0: 640x384 (no detections), 27.9ms

```
0: 640x384 (no detections), 30.0ms
Speed: 1.2ms preprocess, 30.0ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 31.8ms
Speed: 1.1ms preprocess, 31.8ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 29.1ms
Speed: 1.3ms preprocess, 29.1ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 30.9ms
Speed: 1.3ms preprocess, 30.9ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.9ms
Speed: 1.2ms preprocess, 27.9ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 31.6ms
Speed: 1.2ms preprocess, 31.6ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.8ms
Speed: 1.2ms preprocess, 27.8ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.1ms
Speed: 1.4ms preprocess, 27.1ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 29.9ms
Speed: 1.7ms preprocess, 29.9ms inference, 3.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 26.6ms
Speed: 1.3ms preprocess, 26.6ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 41.2ms
Speed: 1.4ms preprocess, 41.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 30.0ms
Speed: 1.4ms preprocess, 30.0ms inference, 0.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 25.8ms
Speed: 1.2ms preprocess, 25.8ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 34.8ms
Speed: 1.1ms preprocess, 34.8ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 35.6ms
Speed: 1.1ms preprocess, 35.6ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 38.2ms
Speed: 1.3ms preprocess, 38.2ms inference, 2.2ms postprocess per image at shape (1, 3, 6
```

0: 640x384 (no detections), 38.4ms

```
Speed: 2.2ms preprocess, 38.4ms inference, 1.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 36.4ms
Speed: 1.4ms preprocess, 36.4ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 34.4ms
Speed: 1.4ms preprocess, 34.4ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 34.9ms
Speed: 1.8ms preprocess, 34.9ms inference, 1.6ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 29.9ms
Speed: 1.3ms preprocess, 29.9ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 31.9ms
Speed: 1.6ms preprocess, 31.9ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 39.2ms
Speed: 1.2ms preprocess, 39.2ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 30.2ms
Speed: 1.1ms preprocess, 30.2ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.5ms
Speed: 1.3ms preprocess, 27.5ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 30.8ms
Speed: 1.1ms preprocess, 30.8ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 32.8ms
Speed: 1.1ms preprocess, 32.8ms inference, 3.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 42.6ms
Speed: 1.2ms preprocess, 42.6ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 28.1ms
Speed: 1.2ms preprocess, 28.1ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 26.8ms
Speed: 1.2ms preprocess, 26.8ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.1ms
Speed: 1.2ms preprocess, 27.1ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.3ms
Speed: 1.1ms preprocess, 27.3ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
```

Speed: 1.1ms preprocess, 27.6ms inference, 1.1ms postprocess per image at shape (1, 3, 6

0: 640x384 (no detections), 27.6ms

```
0: 640x384 (no detections), 27.1ms
Speed: 1.2ms preprocess, 27.1ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 26.9ms
Speed: 2.6ms preprocess, 26.9ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 33.0ms
Speed: 1.1ms preprocess, 33.0ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 32.6ms
Speed: 1.3ms preprocess, 32.6ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 32.9ms
Speed: 1.3ms preprocess, 32.9ms inference, 1.1ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 28.7ms
Speed: 1.1ms preprocess, 28.7ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 34.0ms
Speed: 2.9ms preprocess, 34.0ms inference, 3.5ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 61.7ms
Speed: 1.1ms preprocess, 61.7ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 37.6ms
Speed: 1.3ms preprocess, 37.6ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 38.1ms
Speed: 2.4ms preprocess, 38.1ms inference, 3.9ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 33.6ms
Speed: 2.1ms preprocess, 33.6ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 34.7ms
Speed: 1.2ms preprocess, 34.7ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 30.6ms
Speed: 1.3ms preprocess, 30.6ms inference, 1.3ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 31.4ms
Speed: 1.2ms preprocess, 31.4ms inference, 1.4ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.1ms
Speed: 1.2ms preprocess, 27.1ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
0: 640x384 (no detections), 27.0ms
Speed: 1.2ms preprocess, 27.0ms inference, 1.2ms postprocess per image at shape (1, 3, 6
40, 384)
```

0: 640x384 (no detections), 34.2ms

```
Speed: 1.2ms preprocess, 34.2ms inference, 4.0ms postprocess per image at shape (1, 3, 6
         40, 384)
         0: 640x384 (no detections), 46.4ms
         Speed: 1.2ms preprocess, 46.4ms inference, 1.2ms postprocess per image at shape (1, 3, 6
         40, 384)
         0: 640x384 (no detections), 29.7ms
         Speed: 1.1ms preprocess, 29.7ms inference, 1.3ms postprocess per image at shape (1, 3, 6
         40, 384)
         0: 640x384 (no detections), 27.6ms
         Speed: 1.3ms preprocess, 27.6ms inference, 1.3ms postprocess per image at shape (1, 3, 6
         40, 384)
         0: 640x384 (no detections), 31.6ms
         Speed: 1.3ms preprocess, 31.6ms inference, 1.1ms postprocess per image at shape (1, 3, 6
         40, 384)
         0: 640x384 (no detections), 30.7ms
         Speed: 1.8ms preprocess, 30.7ms inference, 1.3ms postprocess per image at shape (1, 3, 6
         40, 384)
         video.release()
In [92]:
         out.release()
         print(f"Video saved at: {output_path}")
         Video saved at: /content/output_video2.mp4
In [ ]:
```