C:\Users\gurud\.conda\envs\yolov5\_II\python.exe "D:/Repo/MyProjects/Playing Card Detection/yolov5/train.py" --weights yolov5s.pt --data data/datasets.yaml --epoch 100 --img 640 --batch-size 4 --hyp hyp.scratch-high.yaml

train: weights=yolov5s.pt, cfg=, data=data/datasets.yaml, hyp=hyp.scratch-high.yaml, epochs=100, batch\_size=4, imgsz=640, rect=False, resume=False, nosave=False, noval=False, noautoanchor=False, evolve=None, bucket=, cache=None, image\_weights=False, device=, multi\_scale=False, single\_cls=False, optimizer=SGD, sync\_bn=False, workers=8, project=runs\train, name=exp, exist\_ok=False, quad=False, cos\_lr=False, label\_smoothing=0.0, patience=100, freeze=[0], save\_period=-1, local\_rank=-1, entity=None, upload\_dataset=False, bbox\_interval=-1, artifact\_alias=latest

github: up to date with https://github.com/ultralytics/yolov5

fatal: cannot change to 'D:\Repo\MyProjects\Playing': No such file or directory

YOLOv5 2022-3-27 torch 1.10.2 CUDA:0 (GeForce RTX 3060 Laptop GPU, 6144MiB)

hyperparameters: lr0=0.01, lrf=0.1, momentum=0.937, weight\_decay=0.0005, warmup\_epochs=3.0, warmup\_momentum=0.8, warmup\_bias\_lr=0.1, box=0.05, cls=0.3, cls\_pw=1.0, obj=0.7, obj\_pw=1.0, iou\_t=0.2, anchor\_t=4.0, fl\_gamma=0.0, hsv\_h=0.015, hsv\_s=0.7, hsv\_v=0.4, degrees=0.0, translate=0.1, scale=0.9, shear=0.0, perspective=0.0, flipud=0.0, fliplr=0.5, mosaic=1.0, mixup=0.1, copy\_paste=0.1

Weights & Biases: run 'pip install wandb' to automatically track and visualize YOLOv5 runs (RECOMMENDED)

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

Overriding model.yaml nc=80 with nc=6

from n params module arguments

0 -1 1 3520 models.common.Conv [3, 32, 6, 2, 2]

1 -1 1 18560 models.common.Conv [32, 64, 3, 2]

2 -1 1 18816 models.common.C3 [64, 64, 1]

3 -1 1 73984 models.common.Conv [64, 128, 3, 2]

4 -1 2 115712 models.common.C3 [128, 128, 2]

5 -1 1 295424 models.common.Conv [128, 256, 3, 2]

6 -1 3 625152 models.common.C3 [256, 256, 3]

7 -1 1 1180672 models.common.Conv [256, 512, 3, 2]

8 -1 1 1182720 models.common.C3 [512, 512, 1]

9 -1 1 656896 models.common.SPPF [512, 512, 5]

10 -1 1 131584 models.common.Conv [512, 256, 1, 1]

11 -1 1 0 torch.nn.modules.upsampling.Upsample [None, 2, 'nearest']

12 [-1, 6] 1 0 models.common.Concat [1]

13 -1 1 361984 models.common.C3 [512, 256, 1, False]

14 -1 1 33024 models.common.Conv [256, 128, 1, 1]

15 -1 1 0 torch.nn.modules.upsampling.Upsample [None, 2, 'nearest']

16 [-1, 4] 1 0 models.common.Concat [1]

17 -1 1 90880 models.common.C3 [256, 128, 1, False]

18 -1 1 147712 models.common.Conv [128, 128, 3, 2]

19 [-1, 14] 1 0 models.common.Concat [1]

20 -1 1 296448 models.common.C3 [256, 256, 1, False]

21 -1 1 590336 models.common.Conv [256, 256, 3, 2]

22 [-1, 10] 1 0 models.common.Concat [1]

23 -1 1 1182720 models.common.C3 [512, 512, 1, False]

24 [17, 20, 23] 1 29667 models.yolo.Detect [6, [[10, 13, 16, 30, 33, 23], [30, 61, 62, 45, 59, 119], [116, 90, 156, 198, 373, 326]], [128, 256, 512]]

Model summary: 270 layers, 7035811 parameters, 7035811 gradients, 15.9 GFLOPs

Transferred 343/349 items from yolov5s.pt

Scaled weight\_decay = 0.0005

optimizer: SGD with parameter groups 57 weight (no decay), 60 weight, 60 bias

train: Scanning 'D:\Repo\MyProjects\Playing Card Detection\yolov5\Dataset\labels\train.cache' images and labels... 296 found, 0 missing, 0 empty, 0 corrupt: 100%|██████████| 296/296 [00:00<?, ?it/s]

val: Scanning 'D:\Repo\MyProjects\Playing Card Detection\yolov5\Dataset\labels\val.cache' images and labels... 67 found, 0 missing, 0 empty, 0 corrupt: 100%|██████████| 67/67 [00:00<?, ?it/s]

Plotting labels to runs\train\exp10\labels.jpg...

AutoAnchor: 4.38 anchors/target, 1.000 Best Possible Recall (BPR). Current anchors are a good fit to dataset

Image sizes 640 train, 640 val

Using 4 dataloader workers

Logging results to runs\train\exp10

Starting training for 100 epochs...

Epoch gpu\_mem box obj cls labels img\_size

0/99 0.956G 0.1014 0.02846 0.03254 21 640: 100%|██████████| 74/74 [00:11<00:00, 6.60it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 10.64it/s]

all 67 143 0.023 0.175 0.0194 0.00517

Epoch gpu\_mem box obj cls labels img\_size

1/99 1.16G 0.08042 0.02947 0.03173 22 640: 100%|██████████| 74/74 [00:07<00:00, 10.36it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 13.24it/s]

all 67 143 0.0784 0.42 0.0918 0.0265

Epoch gpu\_mem box obj cls labels img\_size

2/99 1.16G 0.07321 0.02481 0.02964 16 640: 100%|██████████| 74/74 [00:06<00:00, 10.88it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 14.91it/s]

all 67 143 0.172 0.301 0.143 0.0368

Epoch gpu\_mem box obj cls labels img\_size

3/99 1.16G 0.06639 0.02312 0.02962 17 640: 100%|██████████| 74/74 [00:06<00:00, 11.96it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 15.16it/s]

all 67 143 0.11 0.492 0.131 0.0683

Epoch gpu\_mem box obj cls labels img\_size

4/99 1.16G 0.0592 0.02286 0.02935 14 640: 100%|██████████| 74/74 [00:06<00:00, 11.80it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.36it/s]

all 67 143 0.155 0.387 0.163 0.0502

Epoch gpu\_mem box obj cls labels img\_size

5/99 1.16G 0.05881 0.0208 0.02973 17 640: 100%|██████████| 74/74 [00:06<00:00, 11.80it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.30it/s]

all 67 143 0.151 0.499 0.17 0.0548

Epoch gpu\_mem box obj cls labels img\_size

6/99 1.16G 0.05049 0.02096 0.0299 31 640: 100%|██████████| 74/74 [00:06<00:00, 11.89it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.63it/s]

all 67 143 0.0943 0.786 0.112 0.039

Epoch gpu\_mem box obj cls labels img\_size

7/99 1.16G 0.05186 0.01922 0.02988 3 640: 100%|██████████| 74/74 [00:06<00:00, 11.00it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.17it/s]

all 67 143 0.17 0.711 0.209 0.122

Epoch gpu\_mem box obj cls labels img\_size

8/99 1.16G 0.04185 0.01839 0.0291 17 640: 100%|██████████| 74/74 [00:06<00:00, 11.76it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.40it/s]

all 67 143 0.177 0.763 0.226 0.136

Epoch gpu\_mem box obj cls labels img\_size

9/99 1.16G 0.04017 0.0169 0.02845 22 640: 100%|██████████| 74/74 [00:06<00:00, 11.34it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.45it/s]

all 67 143 0.177 0.8 0.223 0.138

Epoch gpu\_mem box obj cls labels img\_size

10/99 1.16G 0.03709 0.0161 0.02818 5 640: 100%|██████████| 74/74 [00:06<00:00, 11.64it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.88it/s]

all 67 143 0.167 0.727 0.203 0.125

Epoch gpu\_mem box obj cls labels img\_size

11/99 1.16G 0.03969 0.01682 0.02835 31 640: 100%|██████████| 74/74 [00:06<00:00, 11.89it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.54it/s]

all 67 143 0.176 0.737 0.225 0.148

Epoch gpu\_mem box obj cls labels img\_size

12/99 1.16G 0.03541 0.01522 0.02848 8 640: 100%|██████████| 74/74 [00:06<00:00, 11.34it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.16it/s]

all 67 143 0.174 0.806 0.22 0.148

Epoch gpu\_mem box obj cls labels img\_size

13/99 1.16G 0.0331 0.01626 0.02824 14 640: 100%|██████████| 74/74 [00:06<00:00, 11.86it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 15.90it/s]

all 67 143 0.197 0.744 0.265 0.19

Epoch gpu\_mem box obj cls labels img\_size

14/99 1.16G 0.0321 0.01424 0.02818 10 640: 100%|██████████| 74/74 [00:06<00:00, 11.94it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.65it/s]

all 67 143 0.189 0.78 0.276 0.171

Epoch gpu\_mem box obj cls labels img\_size

15/99 1.16G 0.03321 0.01452 0.02833 14 640: 100%|██████████| 74/74 [00:06<00:00, 11.80it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.20it/s]

all 67 143 0.209 0.802 0.307 0.213

Epoch gpu\_mem box obj cls labels img\_size

16/99 1.16G 0.02836 0.01331 0.02735 14 640: 100%|██████████| 74/74 [00:06<00:00, 11.89it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.98it/s]

all 67 143 0.226 0.764 0.304 0.234

Epoch gpu\_mem box obj cls labels img\_size

17/99 1.16G 0.02803 0.01287 0.02779 18 640: 100%|██████████| 74/74 [00:06<00:00, 11.93it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.49it/s]

all 67 143 0.208 0.783 0.293 0.16

Epoch gpu\_mem box obj cls labels img\_size

18/99 1.16G 0.03357 0.01473 0.02839 34 640: 100%|██████████| 74/74 [00:06<00:00, 11.38it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.00it/s]

all 67 143 0.27 0.736 0.313 0.181

Epoch gpu\_mem box obj cls labels img\_size

19/99 1.16G 0.02968 0.01356 0.02736 23 640: 100%|██████████| 74/74 [00:06<00:00, 11.48it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.33it/s]

all 67 143 0.308 0.681 0.354 0.243

Epoch gpu\_mem box obj cls labels img\_size

20/99 1.16G 0.02761 0.01387 0.02737 21 640: 100%|██████████| 74/74 [00:06<00:00, 11.36it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 15.86it/s]

all 67 143 0.32 0.629 0.339 0.255

Epoch gpu\_mem box obj cls labels img\_size

21/99 1.16G 0.02903 0.01294 0.02809 25 640: 100%|██████████| 74/74 [00:06<00:00, 11.46it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.59it/s]

all 67 143 0.311 0.666 0.351 0.208

Epoch gpu\_mem box obj cls labels img\_size

22/99 1.16G 0.02831 0.0134 0.0273 14 640: 100%|██████████| 74/74 [00:06<00:00, 11.39it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.34it/s]

all 67 143 0.326 0.73 0.381 0.31

Epoch gpu\_mem box obj cls labels img\_size

23/99 1.16G 0.02741 0.0134 0.02827 9 640: 100%|██████████| 74/74 [00:06<00:00, 11.24it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.39it/s]

all 67 143 0.333 0.681 0.403 0.31

Epoch gpu\_mem box obj cls labels img\_size

24/99 1.16G 0.0301 0.01305 0.02753 11 640: 100%|██████████| 74/74 [00:06<00:00, 11.03it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 11.86it/s]

all 67 143 0.317 0.712 0.384 0.244

Epoch gpu\_mem box obj cls labels img\_size

25/99 1.16G 0.02663 0.01296 0.02739 17 640: 100%|██████████| 74/74 [00:07<00:00, 9.98it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.11it/s]

all 67 143 0.354 0.705 0.402 0.296

Epoch gpu\_mem box obj cls labels img\_size

26/99 1.16G 0.02287 0.01184 0.02633 21 640: 100%|██████████| 74/74 [00:06<00:00, 11.81it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.78it/s]

all 67 143 0.331 0.84 0.422 0.323

Epoch gpu\_mem box obj cls labels img\_size

27/99 1.16G 0.0242 0.01213 0.02642 18 640: 100%|██████████| 74/74 [00:06<00:00, 11.86it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.64it/s]

all 67 143 0.337 0.824 0.425 0.333

Epoch gpu\_mem box obj cls labels img\_size

28/99 1.16G 0.02353 0.01307 0.0265 6 640: 100%|██████████| 74/74 [00:06<00:00, 11.84it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.01it/s]

all 67 143 0.35 0.833 0.427 0.289

Epoch gpu\_mem box obj cls labels img\_size

29/99 1.16G 0.0241 0.01269 0.02592 24 640: 100%|██████████| 74/74 [00:06<00:00, 11.81it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.41it/s]

all 67 143 0.339 0.87 0.433 0.334

Epoch gpu\_mem box obj cls labels img\_size

30/99 1.16G 0.02908 0.01287 0.0267 23 640: 100%|██████████| 74/74 [00:06<00:00, 11.72it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.19it/s]

all 67 143 0.352 0.883 0.441 0.304

Epoch gpu\_mem box obj cls labels img\_size

31/99 1.16G 0.02326 0.01093 0.02503 25 640: 100%|██████████| 74/74 [00:06<00:00, 11.92it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.39it/s]

all 67 143 0.34 0.971 0.467 0.364

Epoch gpu\_mem box obj cls labels img\_size

32/99 1.16G 0.02406 0.01118 0.02579 17 640: 100%|██████████| 74/74 [00:06<00:00, 11.95it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.59it/s]

all 67 143 0.35 0.915 0.481 0.365

Epoch gpu\_mem box obj cls labels img\_size

33/99 1.16G 0.02334 0.01145 0.02501 13 640: 100%|██████████| 74/74 [00:06<00:00, 11.81it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.20it/s]

all 67 143 0.353 0.887 0.486 0.377

Epoch gpu\_mem box obj cls labels img\_size

34/99 1.16G 0.02271 0.01122 0.02399 26 640: 100%|██████████| 74/74 [00:06<00:00, 11.80it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.31it/s]

all 67 143 0.388 0.912 0.48 0.333

Epoch gpu\_mem box obj cls labels img\_size

35/99 1.16G 0.02681 0.01213 0.02459 24 640: 100%|██████████| 74/74 [00:06<00:00, 11.85it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.05it/s]

all 67 143 0.423 0.846 0.491 0.358

Epoch gpu\_mem box obj cls labels img\_size

36/99 1.16G 0.02592 0.01266 0.02467 26 640: 100%|██████████| 74/74 [00:06<00:00, 11.62it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.53it/s]

all 67 143 0.411 0.934 0.5 0.37

Epoch gpu\_mem box obj cls labels img\_size

37/99 1.16G 0.02209 0.01147 0.02369 15 640: 100%|██████████| 74/74 [00:06<00:00, 11.77it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.02it/s]

all 67 143 0.428 0.938 0.526 0.366

Epoch gpu\_mem box obj cls labels img\_size

38/99 1.16G 0.02413 0.01175 0.02294 16 640: 100%|██████████| 74/74 [00:06<00:00, 11.79it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.33it/s]

all 67 143 0.427 0.942 0.532 0.385

Epoch gpu\_mem box obj cls labels img\_size

39/99 1.16G 0.02181 0.01121 0.02303 18 640: 100%|██████████| 74/74 [00:06<00:00, 11.70it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.04it/s]

all 67 143 0.425 0.967 0.521 0.355

Epoch gpu\_mem box obj cls labels img\_size

40/99 1.16G 0.02267 0.01135 0.02236 22 640: 100%|██████████| 74/74 [00:06<00:00, 11.69it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.50it/s]

all 67 143 0.474 0.843 0.524 0.322

Epoch gpu\_mem box obj cls labels img\_size

41/99 1.16G 0.02355 0.01105 0.02209 16 640: 100%|██████████| 74/74 [00:06<00:00, 11.80it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.27it/s]

all 67 143 0.466 0.931 0.538 0.443

Epoch gpu\_mem box obj cls labels img\_size

42/99 1.16G 0.02035 0.01083 0.02196 20 640: 100%|██████████| 74/74 [00:06<00:00, 11.81it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.37it/s]

all 67 143 0.473 0.918 0.533 0.44

Epoch gpu\_mem box obj cls labels img\_size

43/99 1.16G 0.021 0.01178 0.02202 13 640: 100%|██████████| 74/74 [00:06<00:00, 11.65it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.65it/s]

all 67 143 0.448 0.963 0.552 0.437

Epoch gpu\_mem box obj cls labels img\_size

44/99 1.16G 0.02024 0.01129 0.02154 30 640: 100%|██████████| 74/74 [00:06<00:00, 11.72it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.58it/s]

all 67 143 0.47 0.937 0.532 0.366

Epoch gpu\_mem box obj cls labels img\_size

45/99 1.16G 0.01988 0.0104 0.02107 14 640: 100%|██████████| 74/74 [00:06<00:00, 11.76it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.36it/s]

all 67 143 0.48 0.958 0.541 0.444

Epoch gpu\_mem box obj cls labels img\_size

46/99 1.16G 0.02212 0.01019 0.02174 7 640: 100%|██████████| 74/74 [00:06<00:00, 11.82it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.34it/s]

all 67 143 0.477 0.978 0.527 0.394

Epoch gpu\_mem box obj cls labels img\_size

47/99 1.16G 0.02166 0.011 0.02136 18 640: 100%|██████████| 74/74 [00:06<00:00, 11.69it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.19it/s]

all 67 143 0.466 0.962 0.534 0.428

Epoch gpu\_mem box obj cls labels img\_size

48/99 1.16G 0.01847 0.01046 0.01942 19 640: 100%|██████████| 74/74 [00:06<00:00, 11.88it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.64it/s]

all 67 143 0.475 0.932 0.531 0.411

Epoch gpu\_mem box obj cls labels img\_size

49/99 1.16G 0.0213 0.01212 0.02045 27 640: 100%|██████████| 74/74 [00:06<00:00, 11.70it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.41it/s]

all 67 143 0.482 0.978 0.557 0.467

Epoch gpu\_mem box obj cls labels img\_size

50/99 1.16G 0.01923 0.01109 0.02065 29 640: 100%|██████████| 74/74 [00:06<00:00, 11.74it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.32it/s]

all 67 143 0.483 0.977 0.566 0.465

Epoch gpu\_mem box obj cls labels img\_size

51/99 1.16G 0.02252 0.01083 0.02047 11 640: 100%|██████████| 74/74 [00:06<00:00, 11.78it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.73it/s]

all 67 143 0.476 0.968 0.565 0.455

Epoch gpu\_mem box obj cls labels img\_size

52/99 1.16G 0.02073 0.01146 0.01955 17 640: 100%|██████████| 74/74 [00:06<00:00, 11.84it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.66it/s]

all 67 143 0.485 0.98 0.562 0.475

Epoch gpu\_mem box obj cls labels img\_size

53/99 1.16G 0.02013 0.01063 0.02024 12 640: 100%|██████████| 74/74 [00:06<00:00, 11.76it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.30it/s]

all 67 143 0.477 0.985 0.562 0.464

Epoch gpu\_mem box obj cls labels img\_size

54/99 1.16G 0.02099 0.01071 0.01956 19 640: 100%|██████████| 74/74 [00:06<00:00, 11.71it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.66it/s]

all 67 143 0.466 0.994 0.56 0.466

Epoch gpu\_mem box obj cls labels img\_size

55/99 1.16G 0.01923 0.0112 0.01952 12 640: 100%|██████████| 74/74 [00:06<00:00, 11.68it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.07it/s]

all 67 143 0.467 0.999 0.547 0.45

Epoch gpu\_mem box obj cls labels img\_size

56/99 1.16G 0.01993 0.01163 0.01968 16 640: 100%|██████████| 74/74 [00:06<00:00, 10.74it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 11.02it/s]

all 67 143 0.47 0.987 0.54 0.432

Epoch gpu\_mem box obj cls labels img\_size

57/99 1.16G 0.01948 0.01077 0.01956 20 640: 100%|██████████| 74/74 [00:06<00:00, 11.34it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.45it/s]

all 67 143 0.475 0.951 0.533 0.436

Epoch gpu\_mem box obj cls labels img\_size

58/99 1.16G 0.01977 0.01047 0.01985 15 640: 100%|██████████| 74/74 [00:06<00:00, 11.60it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.41it/s]

all 67 143 0.475 0.986 0.535 0.434

Epoch gpu\_mem box obj cls labels img\_size

59/99 1.16G 0.01865 0.01061 0.01937 16 640: 100%|██████████| 74/74 [00:06<00:00, 11.74it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.97it/s]

all 67 143 0.47 0.992 0.539 0.456

Epoch gpu\_mem box obj cls labels img\_size

60/99 1.16G 0.01927 0.01168 0.01972 19 640: 100%|██████████| 74/74 [00:06<00:00, 11.10it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.29it/s]

all 67 143 0.475 0.991 0.544 0.461

Epoch gpu\_mem box obj cls labels img\_size

61/99 1.16G 0.01788 0.01031 0.01941 21 640: 100%|██████████| 74/74 [00:07<00:00, 10.52it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.50it/s]

all 67 143 0.482 0.977 0.544 0.463

Epoch gpu\_mem box obj cls labels img\_size

62/99 1.16G 0.01877 0.01076 0.02026 16 640: 100%|██████████| 74/74 [00:06<00:00, 10.60it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.06it/s]

all 67 143 0.473 0.984 0.538 0.451

Epoch gpu\_mem box obj cls labels img\_size

63/99 1.16G 0.01736 0.009994 0.01842 34 640: 100%|██████████| 74/74 [00:07<00:00, 10.31it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.10it/s]

all 67 143 0.487 0.956 0.55 0.464

Epoch gpu\_mem box obj cls labels img\_size

64/99 1.16G 0.01623 0.009891 0.01888 11 640: 100%|██████████| 74/74 [00:07<00:00, 10.14it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 15.60it/s]

all 67 143 0.49 0.979 0.558 0.457

Epoch gpu\_mem box obj cls labels img\_size

65/99 1.16G 0.01772 0.009797 0.01917 17 640: 100%|██████████| 74/74 [00:08<00:00, 8.29it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 10.41it/s]

all 67 143 0.488 0.981 0.557 0.474

Epoch gpu\_mem box obj cls labels img\_size

66/99 1.16G 0.01723 0.009476 0.01904 25 640: 100%|██████████| 74/74 [00:07<00:00, 9.80it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 18.27it/s]

all 67 143 0.487 0.962 0.545 0.444

Epoch gpu\_mem box obj cls labels img\_size

67/99 1.16G 0.01775 0.01057 0.01873 25 640: 100%|██████████| 74/74 [00:06<00:00, 11.97it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 18.28it/s]

all 67 143 0.49 0.977 0.546 0.46

Epoch gpu\_mem box obj cls labels img\_size

68/99 1.16G 0.01791 0.01049 0.01854 14 640: 100%|██████████| 74/74 [00:06<00:00, 12.18it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 18.25it/s]

all 67 143 0.499 0.984 0.564 0.474

Epoch gpu\_mem box obj cls labels img\_size

69/99 1.16G 0.0171 0.009989 0.019 20 640: 100%|██████████| 74/74 [00:05<00:00, 12.51it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 18.42it/s]

all 67 143 0.494 0.99 0.569 0.473

Epoch gpu\_mem box obj cls labels img\_size

70/99 1.16G 0.01747 0.01038 0.01897 20 640: 100%|██████████| 74/74 [00:05<00:00, 12.38it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 18.39it/s]

all 67 143 0.496 0.989 0.577 0.488

Epoch gpu\_mem box obj cls labels img\_size

71/99 1.16G 0.01642 0.009538 0.01867 12 640: 100%|██████████| 74/74 [00:07<00:00, 10.18it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 13.97it/s]

all 67 143 0.495 0.992 0.567 0.492

Epoch gpu\_mem box obj cls labels img\_size

72/99 1.16G 0.01652 0.009538 0.01834 15 640: 100%|██████████| 74/74 [00:06<00:00, 11.04it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 12.98it/s]

all 67 143 0.493 0.988 0.551 0.463

Epoch gpu\_mem box obj cls labels img\_size

73/99 1.16G 0.01729 0.00925 0.01871 15 640: 100%|██████████| 74/74 [00:07<00:00, 10.24it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 14.49it/s]

all 67 143 0.498 0.987 0.554 0.471

Epoch gpu\_mem box obj cls labels img\_size

74/99 1.16G 0.01608 0.009774 0.01876 28 640: 100%|██████████| 74/74 [00:07<00:00, 10.32it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.94it/s]

all 67 143 0.492 0.999 0.543 0.453

Epoch gpu\_mem box obj cls labels img\_size

75/99 1.16G 0.01627 0.009388 0.01807 12 640: 100%|██████████| 74/74 [00:07<00:00, 9.95it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.10it/s]

all 67 143 0.494 0.995 0.551 0.488

Epoch gpu\_mem box obj cls labels img\_size

76/99 1.16G 0.01639 0.01011 0.01857 16 640: 100%|██████████| 74/74 [00:06<00:00, 11.11it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.53it/s]

all 67 143 0.484 0.993 0.55 0.49

Epoch gpu\_mem box obj cls labels img\_size

77/99 1.16G 0.0176 0.01066 0.01866 14 640: 100%|██████████| 74/74 [00:06<00:00, 10.95it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.82it/s]

all 67 143 0.476 0.973 0.548 0.489

Epoch gpu\_mem box obj cls labels img\_size

78/99 1.16G 0.01566 0.009534 0.01814 21 640: 100%|██████████| 74/74 [00:07<00:00, 9.63it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 15.05it/s]

all 67 143 0.462 0.977 0.55 0.478

Epoch gpu\_mem box obj cls labels img\_size

79/99 1.16G 0.01575 0.009583 0.01792 20 640: 100%|██████████| 74/74 [00:07<00:00, 10.49it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 18.02it/s]

all 67 143 0.467 0.974 0.547 0.469

Epoch gpu\_mem box obj cls labels img\_size

80/99 1.16G 0.01495 0.009697 0.01777 14 640: 100%|██████████| 74/74 [00:06<00:00, 11.49it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.86it/s]

all 67 143 0.477 0.98 0.545 0.478

Epoch gpu\_mem box obj cls labels img\_size

81/99 1.16G 0.01732 0.01089 0.01857 20 640: 100%|██████████| 74/74 [00:08<00:00, 9.09it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.01it/s]

all 67 143 0.479 0.993 0.553 0.484

Epoch gpu\_mem box obj cls labels img\_size

82/99 1.16G 0.01655 0.01006 0.01878 16 640: 100%|██████████| 74/74 [00:06<00:00, 10.87it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.37it/s]

all 67 143 0.477 0.994 0.544 0.481

Epoch gpu\_mem box obj cls labels img\_size

83/99 1.16G 0.01545 0.009178 0.01875 22 640: 100%|██████████| 74/74 [00:06<00:00, 10.61it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.44it/s]

all 67 143 0.472 1 0.555 0.49

Epoch gpu\_mem box obj cls labels img\_size

84/99 1.16G 0.01381 0.008542 0.01726 9 640: 100%|██████████| 74/74 [00:06<00:00, 11.12it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.83it/s]

all 67 143 0.481 0.994 0.565 0.495

Epoch gpu\_mem box obj cls labels img\_size

85/99 1.16G 0.01385 0.008845 0.01761 19 640: 100%|██████████| 74/74 [00:07<00:00, 10.51it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.74it/s]

all 67 143 0.49 0.999 0.556 0.492

Epoch gpu\_mem box obj cls labels img\_size

86/99 1.16G 0.01467 0.009195 0.01783 14 640: 100%|██████████| 74/74 [00:06<00:00, 11.24it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.72it/s]

all 67 143 0.49 0.998 0.562 0.496

Epoch gpu\_mem box obj cls labels img\_size

87/99 1.16G 0.0143 0.009443 0.01739 21 640: 100%|██████████| 74/74 [00:06<00:00, 11.06it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.60it/s]

all 67 143 0.485 0.993 0.558 0.495

Epoch gpu\_mem box obj cls labels img\_size

88/99 1.16G 0.01453 0.008961 0.01852 19 640: 100%|██████████| 74/74 [00:06<00:00, 11.16it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.89it/s]

all 67 143 0.488 0.993 0.556 0.495

Epoch gpu\_mem box obj cls labels img\_size

89/99 1.16G 0.01539 0.008987 0.01785 7 640: 100%|██████████| 74/74 [00:06<00:00, 11.20it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.12it/s]

all 67 143 0.492 0.993 0.549 0.489

Epoch gpu\_mem box obj cls labels img\_size

90/99 1.16G 0.01431 0.009229 0.01777 13 640: 100%|██████████| 74/74 [00:06<00:00, 11.09it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.44it/s]

all 67 143 0.485 0.992 0.538 0.483

Epoch gpu\_mem box obj cls labels img\_size

91/99 1.16G 0.01434 0.009306 0.01829 32 640: 100%|██████████| 74/74 [00:06<00:00, 11.16it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.67it/s]

all 67 143 0.483 0.994 0.54 0.486

Epoch gpu\_mem box obj cls labels img\_size

92/99 1.16G 0.01439 0.009546 0.01778 15 640: 100%|██████████| 74/74 [00:06<00:00, 11.13it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.00it/s]

all 67 143 0.487 0.99 0.547 0.489

Epoch gpu\_mem box obj cls labels img\_size

93/99 1.16G 0.01398 0.008518 0.01772 9 640: 100%|██████████| 74/74 [00:06<00:00, 11.20it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.37it/s]

all 67 143 0.487 0.989 0.544 0.486

Epoch gpu\_mem box obj cls labels img\_size

94/99 1.16G 0.01475 0.009811 0.01796 24 640: 100%|██████████| 74/74 [00:06<00:00, 11.17it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.89it/s]

all 67 143 0.49 0.988 0.553 0.495

Epoch gpu\_mem box obj cls labels img\_size

95/99 1.16G 0.01396 0.009188 0.01767 16 640: 100%|██████████| 74/74 [00:06<00:00, 11.09it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.71it/s]

all 67 143 0.494 0.971 0.558 0.5

Epoch gpu\_mem box obj cls labels img\_size

96/99 1.16G 0.014 0.009186 0.01817 20 640: 100%|██████████| 74/74 [00:06<00:00, 11.14it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.93it/s]

all 67 143 0.491 0.982 0.554 0.499

Epoch gpu\_mem box obj cls labels img\_size

97/99 1.16G 0.01363 0.008958 0.01769 15 640: 100%|██████████| 74/74 [00:06<00:00, 11.21it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.38it/s]

all 67 143 0.484 0.992 0.555 0.5

Epoch gpu\_mem box obj cls labels img\_size

98/99 1.16G 0.01334 0.007969 0.01732 8 640: 100%|██████████| 74/74 [00:06<00:00, 11.28it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 17.00it/s]

all 67 143 0.484 0.983 0.555 0.505

Epoch gpu\_mem box obj cls labels img\_size

99/99 1.16G 0.0124 0.008403 0.01726 12 640: 100%|██████████| 74/74 [00:06<00:00, 11.30it/s]

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:00<00:00, 16.33it/s]

all 67 143 0.487 0.989 0.551 0.496

100 epochs completed in 0.210 hours.

Optimizer stripped from runs\train\exp10\weights\last.pt, 14.4MB

Optimizer stripped from runs\train\exp10\weights\best.pt, 14.4MB

Validating runs\train\exp10\weights\best.pt...

Fusing layers...

Model summary: 213 layers, 7026307 parameters, 0 gradients, 15.8 GFLOPs

Class Images Labels P R mAP@.5 mAP@.5:.95: 100%|██████████| 9/9 [00:01<00:00, 6.19it/s]

all 67 143 0.484 0.983 0.554 0.503

king 67 23 0.308 0.968 0.52 0.447

queen 67 26 0.384 0.96 0.398 0.344

jack 67 24 0.333 0.977 0.336 0.293

ten 67 18 0.407 0.993 0.473 0.44

nine 67 26 0.591 1 0.602 0.556

ace 67 26 0.879 1 0.994 0.938

Results saved to runs\train\exp10

Process finished with exit code 0