```
!git clone https://github.com/ultralytics/yolov5  # clone repo
!pip install -U -r yolov5/requirements.txt  # install dependencies
```

```
Cloning into 'yolov5'...
remote: Enumerating objects: 8102, done.
remote: Counting objects: 100% (414/414), done.
remote: Compressing objects: 100% (173/173), done.
remote: Total 8102 (delta 286), reused 347 (delta 241), pack-reused 7688
Receiving objects: 100% (8102/8102), 9.43 MiB | 20.51 MiB/s, done.
Resolving deltas: 100% (5582/5582), done.
Collecting matplotlib>=3.2.2
  Downloading https://files.pythonhosted.org/packages/24/33/5568d443ba438d95d4db635dc
     |████████████████████████████████| 10.3MB 8.2MB/s
Collecting numpy>=1.18.5
  Downloading https://files.pythonhosted.org/packages/3f/03/c3526fb4e79a793498829ca57
     |████████████████████████████████| 15.7MB 197kB/s
Collecting opencv-python>=4.1.2
  Downloading https://files.pythonhosted.org/packages/6b/73/a8921d221a673600dc744033
     |████████████████████████████████| 49.9MB 56kB/s
Collecting Pillow
  Downloading https://files.pythonhosted.org/packages/8e/7a/b047f6f80fdb02c0cca1d3761
     |████████████████████████████████| 3.0MB 45.3MB/s
Collecting PyYAML>=5.3.1
  Downloading https://files.pythonhosted.org/packages/7a/a5/393c087efdc78091afa2af9f1
     |████████████████████████████████| 645kB 36.9MB/s
Collecting scipy>=1.4.1
  Downloading https://files.pythonhosted.org/packages/b2/85/b00f13b52d079b5625e1a123
     |████████████████████████████████| 28.5MB 112kB/s
Requirement already up-to-date: torch>=1.7.0 in /usr/local/lib/python3.7/dist-package
Requirement already up-to-date: torchvision>=0.8.1 in /usr/local/lib/python3.7/dist-p
Collecting tqdm>=4.41.0
  Downloading https://files.pythonhosted.org/packages/7a/ec/f8ff3ccfc4e59ce619a66a0bf
     |████████████████████████████████| 81kB 11.6MB/s
Requirement already up-to-date: tensorboard>=2.4.1 in /usr/local/lib/python3.7/dist-p
Requirement already up-to-date: seaborn>=0.11.0 in /usr/local/lib/python3.7/dist-pack
Collecting pandas
  Downloading https://files.pythonhosted.org/packages/99/f7/01cea7f6c963100f045876eb4
     |████████████████████████████████| 10.8MB 32.3MB/s
Collecting thop
  Downloading https://files.pythonhosted.org/packages/6c/8b/22ce44e1c71558161a8bd5447
Requirement already satisfied, skipping upgrade: python-dateutil>=2.7 in /usr/local/l
Requirement already satisfied, skipping upgrade: kiwisolver>=1.0.1 in /usr/local/lib/
Requirement already satisfied, skipping upgrade: cycler>=0.10 in /usr/local/lib/pytho
Requirement already satisfied, skipping upgrade: pyparsing>=2.2.1 in /usr/local/lib/p
Requirement already satisfied, skipping upgrade: typing-extensions in /usr/local/lib/
Requirement already satisfied, skipping upgrade: werkzeug>=0.11.15 in /usr/local/lib/
Requirement already satisfied, skipping upgrade: protobuf>=3.6.0 in /usr/local/lib/py
Requirement already satisfied, skipping upgrade: google-auth-oauthlib<0.5,>=0.4.1 in
Requirement already satisfied, skipping upgrade: tensorboard-data-server<0.7.0,>=0.6
```

```
#installing for google colab GPU use
!pip install torch==1.6.0+cu101 torchvision==0.7.0+cu101 -f https://download.pytorch.org/w
```

```
Looking in links: https://download.pytorch.org/whl/torch_stable.html
Collecting torch==1.6.0+cu101
  Downloading https://download.pytorch.org/whl/cu101/torch-1.6.0%2Bcu101-cp37-cp37m-l
     |████████████████████████████████| 708.0MB 26kB/s
Collecting torchvision==0.7.0+cu101
  Downloading https://download.pytorch.org/whl/cu101/torchvision-0.7.0%2Bcu101-cp37-c
     |████████████████████████████████| 5.9MB 61.1MB/s
Requirement already satisfied: future in /usr/local/lib/python3.7/dist-packages (from
Requirement already satisfied: numpy in /usr/local/lib/python3.7/dist-packages (from
Requirement already satisfied: pillow>=4.1.1 in /usr/local/lib/python3.7/dist-package
ERROR: torchtext 0.10.0 has requirement torch==1.9.0, but you'll have torch 1.6.0+cu1
```

```
Installing collected packages: torch, torchvision
  Found existing installation: torch 1.9.0+cu102
    Uninstalling torch-1.9.0+cu102:
      Successfully uninstalled torch-1.9.0+cu102
  Found existing installation: torchvision 0.10.0+cu102
    Uninstalling torchvision-0.10.0+cu102:
      Successfully uninstalled torchvision-0.10.0+cu102
Successfully installed torch-1.6.0+cu101 torchvision-0.7.0+cu101
```

```
%cd /content/yolov5
```

```
/content/yolov5
```

```
import torch
from IPython.display import Image  # for displaying images
from utils.google_utils import gdrive_download  # for downloading models/datasets

print('Using torch %s %s' % (torch.__version__, torch.cuda.get_device_properties(0) if tor
```

```
Using torch 1.6.0+cu101 _CudaDeviceProperties(name='Tesla T4', major=7, minor=5, tota
```

```
    Uninstalling PyYAML-3.13:
```

```
!curl -L "https://public.roboflow.com/ds/XxC3ioQwJF?key=3LJjn2JaDG" > roboflow.zip; unzip
```

```
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100   889  100   889    0     0   1825      0 --:--:-- --:--:-- --:--:--  1825
100 11.5M  100 11.5M    0     0  13.3M      0 --:--:-- --:--:-- --:--:--  321M
Archive:  roboflow.zip
 extracting: README.dataset.txt
 extracting: README.roboflow.txt
 extracting: data.yaml
   creating: export/
   creating: export/images/
 extracting: export/images/raccoon-100_jpg.rf.YWIftfgUdZqJLTkvI9W2.jpg
 extracting: export/images/raccoon-101_jpg.rf.ebfr15yC06H7KdSNWJkC.jpg
 extracting: export/images/raccoon-102_jpg.rf.Vtizg4N4D1Wn9fv4sBaJ.jpg
 extracting: export/images/raccoon-103_jpg.rf.yx4ScGFA2FZ23qfitAfV.jpg
 extracting: export/images/raccoon-104_jpg.rf.HdpZVmq1teO4b2ny0HJO.jpg
 extracting: export/images/raccoon-105_jpg.rf.S4P0w34qeFrLIhNIHmuD.jpg
 extracting: export/images/raccoon-106_jpg.rf.UCuMtEoBFF5lvbYSErKC.jpg
 extracting: export/images/raccoon-107_jpg.rf.pQbBB9zNruyNhePH5B52.jpg
 extracting: export/images/raccoon-108_jpg.rf.qFSgit2nhskdamOaI6Nm.jpg
 extracting: export/images/raccoon-109_jpg.rf.LzEfJ28WbPo5OxpukIGd.jpg
 extracting: export/images/raccoon-10_jpg.rf.umSu38h2FUXMMT9rANBV.jpg
 extracting: export/images/raccoon-110_jpg.rf.9H9GqFdeMHk8Vh3CTgtP.jpg
 extracting: export/images/raccoon-111_jpg.rf.LEvSQCZ7dQDrt8BQ1cUm.jpg
 extracting: export/images/raccoon-112_jpg.rf.nbkvNSV9kgY2YMtnEt10.jpg
 extracting: export/images/raccoon-113_jpg.rf.fnc60ia7jy2Ibb5I4gS3.jpg
 extracting: export/images/raccoon-114_jpg.rf.RiU3t94Jeo5W0fd770Vt.jpg
 extracting: export/images/raccoon-115_jpg.rf.7RRyMHlnx22S2N6vniTN.jpg
 extracting: export/images/raccoon-117_jpg.rf.fVB0ixT8jKL4RVN9U1IR.jpg
 extracting: export/images/raccoon-118_jpg.rf.4UxK1xxdM4Tfqf7ddN6j.jpg
 extracting: export/images/raccoon-119_jpg.rf.bmAg2RtNoisxOmzkfzbE.jpg
 extracting: export/images/raccoon-11_jpg.rf.lNZTRyjSWF2bN5P9Pz7z.jpg
 extracting: export/images/raccoon-121_jpg.rf.0vtSjAnB6eM9ME4D67ol.jpg
```

```
extracting: export/images/raccoon-122_jpg.rf.aD7ZY4UYguNK7JYpLx0c.jpg
extracting: export/images/raccoon-123_jpg.rf.e2T41DASi7hi7wG7hfCv.jpg
extracting: export/images/raccoon-124_jpg.rf.8q2LIZpw29DCvJBEjkfw.jpg
extracting: export/images/raccoon-125_jpg.rf.V2Ul5pPMx4k6ogBIMwjR.jpg
extracting: export/images/raccoon-126_jpg.rf.YsqOAv7zuAzV39ZNjJWF.jpg
extracting: export/images/raccoon-127_jpg.rf.OKCWEzHOMMeiTTxbjOqe.jpg
extracting: export/images/raccoon-128_jpg.rf.wVPQVhCxh9rg5pvhDqMY.jpg
extracting: export/images/raccoon-129_jpg.rf.nFKEP4T5G7uyinMGKHqt.jpg
extracting: export/images/raccoon-12_jpg.rf.9XeEPEIOrBYa8SV7y8nL.jpg
extracting: export/images/raccoon-130_jpg.rf.DXMxqz61gFaA9r6hPaq9.jpg
extracting: export/images/raccoon-131_jpg.rf.qcvI2Yyo9dCoMVIx6qNw.jpg
extracting: export/images/raccoon-132_jpg.rf.JuPvZXmiUTpKidRE0xBK.jpg
extracting: export/images/raccoon-133_jpg.rf.AumbkGBEaK3if3xr2rXy.jpg
extracting: export/images/raccoon-134_jpg.rf.RFGL6ESeJCrId85Vm15G.jpg
extracting: export/images/raccoon-135_jpg.rf.IMrZrg6Kz4AEOlCpze8l.jpg
extracting: export/images/raccoon-136_jpg.rf.qyzqkaghSS8MCBX84b2s.jpg
extracting: export/images/raccoon-137_jpg.rf.pTlX2hsGoAvoglO0LBnD.jpg
extracting: export/images/raccoon-138_jpg.rf.iaM9s8IMWeoRA5VnDJXP.jpg
extracting: export/images/raccoon-139_jpg.rf.YuOi6NoWDJZngmRFa2yO.jpg
extracting: export/images/raccoon-13_jpg.rf.hW0fUIZl7o6oWoyl7Kpf.jpg
extracting: export/images/raccoon-140_jpg.rf.XHbEI3OuH8rgeHzLDNDi.jpg
extracting: export/images/raccoon-141_jpg.rf.Z5FqPjTBW22zdXU1DAbv.jpg
extracting: export/images/raccoon-142_jpg.rf.elSPBxwT3Cs6QobeFtY9.jpg
extracting: export/images/raccoon-143_jpg.rf.MJwGepEt8iJgbqjol0sN.jpg
extracting: export/images/raccoon-144_jpg.rf.BsojHoPGoxD11h7QIylE.jpg
extracting: export/images/raccoon-145_jpg.rf.JCWppjwVzSTAK5Fv0aSs.jpg
extracting: export/images/raccoon-146_jpg.rf.AT3QEtpurP9GNGFMNHUU.jpg
```

```
%cat data.yaml
```

```
train: ../train/images
val: ../valid/images

nc: 1
names: ['raccoon']
```

```
import yaml
with open("data.yaml", 'r') as stream:
    num_classes = str(yaml.safe_load(stream)['nc'])
```

```
import yaml
with open("data.yaml", 'r') as stream:
    num_classes = str(yaml.safe_load(stream)['nc'])
```

```
from IPython.core.magic import register_line_cell_magic

@register_line_cell_magic
def writetemplate(line, cell):
    with open(line, 'w') as f:
        f.write(cell.format(**globals()))
```

```
%%writetemplate /content/yolov5/data.yaml

train: ./train/images
val: ./valid/images
```

```
nc: 1
names: ['raccoon']
```

```
%cat data.yaml
```

```
train: ./train/images
val: ./valid/images

nc: 1
names: ['raccoon']
```

```
yaml.__version__
```

```
'3.13'
```

```
import yaml
with open('data.yaml') as file:
    # The FullLoader parameter handles the conversion from YAML
    # scalar values to Python the dictionary format
    labels_list = yaml.safe_load(file)

    label_names = labels_list['names']
```

```
print("Number of Classes are {}, whose labels are {} for this Object Detection project".fo
```

```
Number of Classes are 1, whose labels are ['raccoon'] for this Object Detection proje
```

```
%cat /content/yolov5/models/yolov5s.yaml
```

```
# Parameters
nc: 80  # number of classes
depth_multiple: 0.33  # model depth multiple
width_multiple: 0.50  # layer channel multiple
anchors:
  - [10,13, 16,30, 33,23]  # P3/8
  - [30,61, 62,45, 59,119]  # P4/16
  - [116,90, 156,198, 373,326]  # P5/32

# YOLOv5 backbone
backbone:
  # [from, number, module, args]
  [[-1, 1, Focus, [64, 3]],  # 0-P1/2
   [-1, 1, Conv, [128, 3, 2]],  # 1-P2/4
   [-1, 3, C3, [128]],
   [-1, 1, Conv, [256, 3, 2]],  # 3-P3/8
   [-1, 9, C3, [256]],
   [-1, 1, Conv, [512, 3, 2]],  # 5-P4/16
   [-1, 9, C3, [512]],
   [-1, 1, Conv, [1024, 3, 2]],  # 7-P5/32
   [-1, 1, SPP, [1024, [5, 9, 13]]],
   [-1, 3, C3, [1024, False]],  # 9
  ]
```

```
      # YOLOv5 head
      head:
        [[-1, 1, Conv, [512, 1, 1]],
         [-1, 1, nn.Upsample, [None, 2, 'nearest']],
         [[-1, 6], 1, Concat, [1]],  # cat backbone P4
         [-1, 3, C3, [512, False]],  # 13

         [-1, 1, Conv, [256, 1, 1]],
         [-1, 1, nn.Upsample, [None, 2, 'nearest']],
         [[-1, 4], 1, Concat, [1]],  # cat backbone P3
         [-1, 3, C3, [256, False]],  # 17 (P3/8-small)

         [-1, 1, Conv, [256, 3, 2]],
         [[-1, 14], 1, Concat, [1]],  # cat head P4
         [-1, 3, C3, [512, False]],  # 20 (P4/16-medium)

         [-1, 1, Conv, [512, 3, 2]],
         [[-1, 10], 1, Concat, [1]],  # cat head P5
         [-1, 3, C3, [1024, False]],  # 23 (P5/32-large)

         [[17, 20, 23], 1, Detect, [nc, anchors]],  # Detect(P3, P4, P5)
        ]


# Below we are changing the configuration so that it becomes compatible to number of class
%%writetemplate /content/yolov5/models/custom_yolov5s.yaml

# parameters
nc: 1  # number of classes  # CHANGED HERE
depth_multiple: 0.33  # model depth multiple
width_multiple: 0.50  # layer channel multiple

# anchors
anchors:
  - [10,13, 16,30, 33,23]  # P3/8
  - [30,61, 62,45, 59,119]  # P4/16
  - [116,90, 156,198, 373,326]  # P5/32

# YOLOv5 backbone
backbone:
  # [from, number, module, args]
  [[-1, 1, Focus, [64, 3]],  # 0-P1/2
   [-1, 1, Conv, [128, 3, 2]],  # 1-P2/4
   [-1, 3, BottleneckCSP, [128]],
   [-1, 1, Conv, [256, 3, 2]],  # 3-P3/8
   [-1, 9, BottleneckCSP, [256]],
   [-1, 1, Conv, [512, 3, 2]],  # 5-P4/16
   [-1, 9, BottleneckCSP, [512]],
   [-1, 1, Conv, [1024, 3, 2]],  # 7-P5/32
   [-1, 1, SPP, [1024, [5, 9, 13]]],
   [-1, 3, BottleneckCSP, [1024, False]],  # 9
  ]

# YOLOv5 head
head:
  [[-1, 1, Conv, [512, 1, 1]],
   [-1, 1, nn.Upsample, [None, 2, 'nearest']],
   [[-1, 6], 1, Concat, [1]],  # cat backbone P4
```

```
    [-1, 3, BottleneckCSP, [512, False]],  # 13

    [-1, 1, Conv, [256, 1, 1]],
    [-1, 1, nn.Upsample, [None, 2, 'nearest']],
    [[-1, 4], 1, Concat, [1]],  # cat backbone P3
    [-1, 3, BottleneckCSP, [256, False]],  # 17 (P3/8-small)

    [-1, 1, Conv, [256, 3, 2]],
    [[-1, 14], 1, Concat, [1]],  # cat head P4
    [-1, 3, BottleneckCSP, [512, False]],  # 20 (P4/16-medium)

    [-1, 1, Conv, [512, 3, 2]],
    [[-1, 10], 1, Concat, [1]],  # cat head P5
    [-1, 3, BottleneckCSP, [1024, False]],  # 23 (P5/32-large)

    [[17, 20, 23], 1, Detect, [nc, anchors]],  # Detect(P3, P4, P5)
  ]
```

```
import os
os.chdir('/content/yolov5')
```

```
# train yolov5s on Aquarium object detection data for 100 epochs [aroung 1000 epochs for b
# NOTE: All the images are already pre-processed to 416 x 416 size.
# We will be training for 100 epoch (increase it for better result) with batch size of 80
# data.yaml also contains the information about location of Train and Validation Data. Tha
# the training also requires the configuration of neural network, which is in custom_yolov
# weights will be by-default stored at /content/yolov5/runs/exp2/weights/best.pt
# time its performance
%%time
%cd /content/yolov5/
!python train.py --img 416 --batch 80 --epochs 1000 --data './data.yaml' --cfg ./models/cu
```

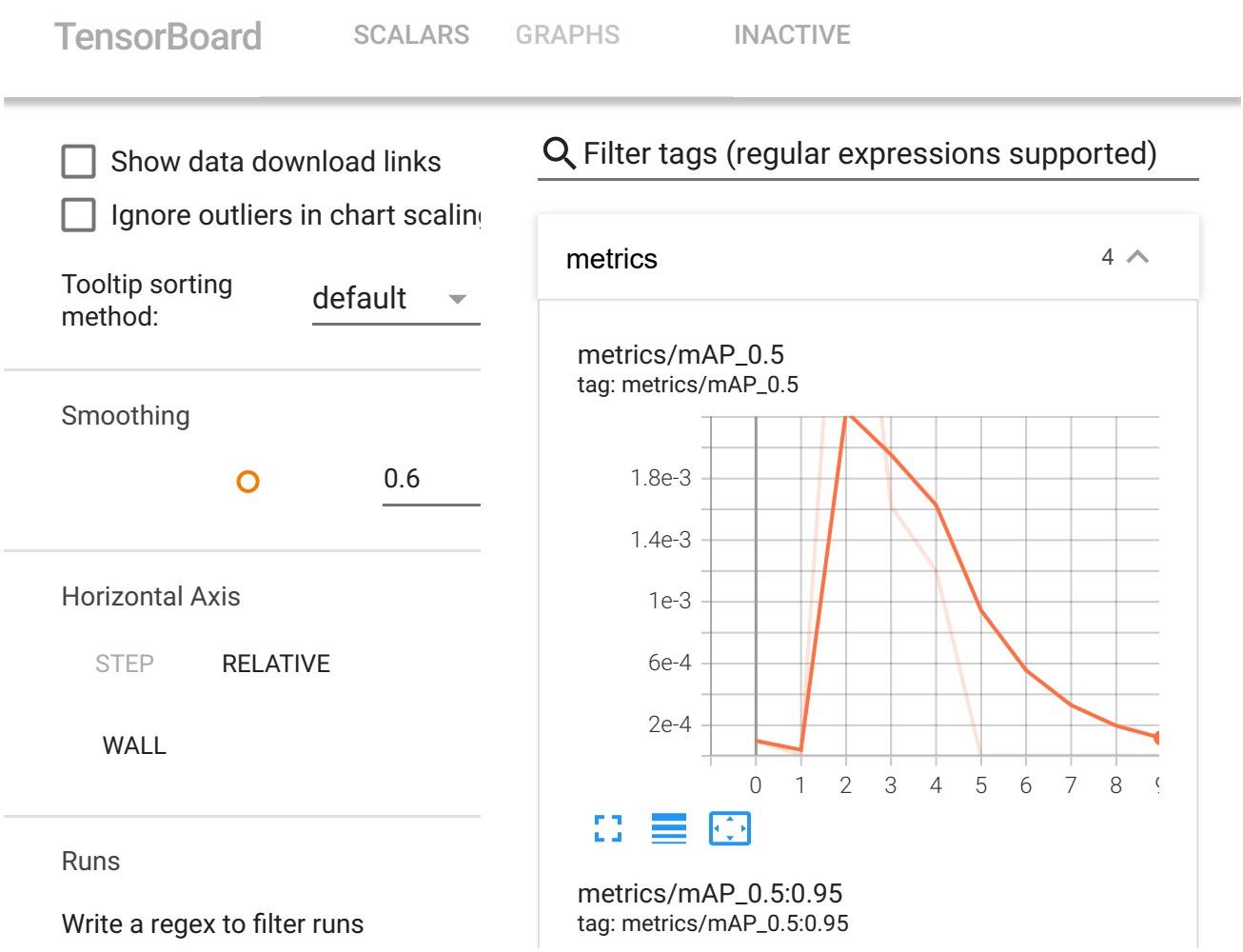
Streaming output truncated to the last 5000 lines.

```
               Class     Images     Labels          P          R     mAP@.5 mAP@.5
                 all         29         29   0.000115     0.0345   4.54e-06   9.09

      Epoch   gpu_mem       box       obj       cls     total    labels  img_size
      2/999     6.96G    0.1037   0.02401         0    0.1277       210       416:
               Class     Images     Labels          P          R     mAP@.5 mAP@.5
                 all         29         29    0.00418      0.966    0.00408   0.00

      Epoch   gpu_mem       box       obj       cls     total    labels  img_size
      3/999     6.96G    0.0976   0.02527         0    0.1229       206       416:
               Class     Images     Labels          P          R     mAP@.5 mAP@.5
                 all         29         29    0.00264      0.517    0.00142   0.00

      Epoch   gpu_mem       box       obj       cls     total    labels  img_size
      4/999     6.96G   0.09033   0.02486         0    0.1152       194       416:
               Class     Images     Labels          P          R     mAP@.5 mAP@.5
                 all         29         29    0.00158       0.31   0.000507   6.29

      Epoch   gpu_mem       box       obj       cls     total    labels  img_size
      5/999     6.96G   0.08748   0.02365         0    0.1111       169       416:
               Class     Images     Labels          P          R     mAP@.5 mAP@.5
                 all         29          0          0          0          0
```

```
      Epoch   gpu_mem       box       obj       cls     total    labels  img_size
      6/999     6.96G   0.08385   0.02367         0    0.1075       168       416:
                Class     Images     Labels          P          R     mAP@.5 mAP@.5
                  all         29          0          0          0          0

      Epoch   gpu_mem       box       obj       cls     total    labels  img_size
      7/999     6.96G   0.08351   0.02584         0    0.1094       207       416:
                Class     Images     Labels          P          R     mAP@.5 mAP@.5
                  all         29          0          0          0          0

      Epoch   gpu_mem       box       obj       cls     total    labels  img_size
      8/999     6.96G   0.07785     0.026         0    0.1039       181       416:
                Class     Images     Labels          P          R     mAP@.5 mAP@.5
                  all         29          0          0          0          0

      Epoch   gpu_mem       box       obj       cls     total    labels  img_size
      9/999     6.96G   0.08069   0.02591         0    0.1066       200       416:
                Class     Images     Labels          P          R     mAP@.5 mAP@.5
                  all         29          0          0          0          0

      Epoch   gpu_mem       box       obj       cls     total    labels  img_size
     10/999     6.96G   0.07195   0.02433         0   0.09628       169       416:
                Class     Images     Labels          P          R     mAP@.5 mAP@.5
                  all         29          0          0          0          0

      Epoch   gpu_mem       box       obj       cls     total    labels  img_size
     11/999     6.96G   0.07741   0.02328         0    0.1007       165       416:
                Class     Images     Labels          P          R     mAP@.5 mAP@.5
                  all         29          0          0          0          0

      Epoch   gpu_mem       box       obj       cls     total    labels  img_size
     12/999     6.96G   0.07687   0.02566         0    0.1025       191       416:
                Class     Images     Labels          P          R     mAP@.5 mAP@.5
                  all         29          0          0          0          0
```

```
# Start tensorboard
# Launch after you have started training to all the graphs needed for inspection
# logs save in the folder "runs"
%load_ext tensorboard
%tensorboard --logdir /content/yolov5/runs
```

```
The tensorboard extension is already loaded. To reload it, use:
  %reload_ext tensorboard
Reusing TensorBoard on port 6006 (pid 335), started 0:03:39 ago. (Use '!kill 335' to
```




```
# use the best weights!
# Final weights will be by-default stored at /content/yolov5/runs/train/exp2/weights/best.
%cd /content/yolov5/
!python detect.py --weights /content/yolov5/runs/train/exp3/weights/best.pt --img 416 --co
```

```
/content/yolov5
detect: weights=['/content/yolov5/runs/train/exp3/weights/best.pt'], source=./test/im
YOLOv5 🚀 v5.0-288-g8ee9fd1 torch 1.9.0+cu102 CUDA:0 (Tesla T4, 15109.75MB)

Fusing layers...
/usr/local/lib/python3.7/dist-packages/torch/nn/functional.py:718: UserWarning: Named
  return torch.max_pool2d(input, kernel_size, stride, padding, dilation, ceil_mode)
Model Summary: 232 layers, 7246518 parameters, 0 gradients, 16.8 GFLOPs
image 1/17 /content/yolov5/test/images/raccoon-57_jpg.rf.26f3fae218f26088f6a7405c58ae
image 2/17 /content/yolov5/test/images/raccoon-58_jpg.rf.ff9de9977475e0086e7ab582122c
image 3/17 /content/yolov5/test/images/raccoon-59_jpg.rf.388d6dd8c9d5a6fc7ca75790e680
image 4/17 /content/yolov5/test/images/raccoon-60_jpg.rf.cff8b797e6b5c9b716b6be70be2b
image 5/17 /content/yolov5/test/images/raccoon-61_jpg.rf.58c4f561336525f59d395ce21508
image 6/17 /content/yolov5/test/images/raccoon-62_jpg.rf.e997ede5457f069436178f08065c
image 7/17 /content/yolov5/test/images/raccoon-63_jpg.rf.1b33356e79739a8a1f3676a9f4f9
image 8/17 /content/yolov5/test/images/raccoon-64_jpg.rf.5201bb870708d051100bbbb8c148
image 9/17 /content/yolov5/test/images/raccoon-66_jpg.rf.447ffe6a6b6cd768de213288bb06
image 10/17 /content/yolov5/test/images/raccoon-67_jpg.rf.626d83ff044dd4e2b37cbf4b417
image 11/17 /content/yolov5/test/images/raccoon-68_jpg.rf.f307e4242845e8e03c27271f5b3
image 12/17 /content/yolov5/test/images/raccoon-69_jpg.rf.87d4a574d6f7ab57f5fc39620d1
image 13/17 /content/yolov5/test/images/raccoon-6_jpg.rf.e1ef482779f9ef651ec62ed3a9c1
```

```
image 14/17 /content/yolov5/test/images/raccoon-70_jpg.rf.a6800b2698e4aed694cc0c0c8c8
image 15/17 /content/yolov5/test/images/raccoon-71_jpg.rf.a66c60622f34ad56ff13e712485
image 16/17 /content/yolov5/test/images/raccoon-72_jpg.rf.8179b0a10f21dc1424a7ad48d8e
image 17/17 /content/yolov5/test/images/raccoon-7_jpg.rf.23286e3ec911b9f6f22c5153d60e
Results saved to runs/detect/exp8
Done. (0.298s)
```

```
print("GROUND TRUTH TRAINING DATA:")
Image(filename='/content/yolov5/runs/train/exp3/test_batch0_labels.jpg', width=900)
```

GROUND TRUTH TRAINING DATA:


```
#display inference on ALL test images
#this looks much better with longer training above

import glob
from IPython.display import Image, display

for imageName in glob.glob('/content/yolov5/runs/detect/exp5/*.jpg'): #assuming JPG
    display(Image(filename=imageName))
    print("\n")
```


raccoon 0.78