```
In [1]:
         import os
         import random
         import shutil
         import time
         import warnings
         import torch
         import torch.nn as nn
         import torch.backends.cudnn as cudnn
         import torch.optim
         import torch.utils.data
         import torchvision
         import torchvision.transforms as transforms
         import torchvision.datasets as datasets
         import torchvision.models as models
In [2]:
         from torch.cuda.amp import GradScaler
         from torch.cuda.amp import autocast
In [3]:
         from torch.utils.tensorboard import SummaryWriter
         writer = SummaryWriter()
In [4]:
         !pip install wandb
        Collecting wandb
          Downloading wandb-0.12.6-py2.py3-none-any.whl (1.7 MB)
                                              1.7 MB 6.6 MB/s eta 0:00:01
        Requirement already satisfied: Click!=8.0.0,>=7.0 in /opt/conda/lib/python3.8/site-packages (from wandb) (7.1.2)
        Collecting shortuuid>=0.5.0
          Downloading shortuuid-1.0.1-py3-none-any.whl (7.5 kB)
        Collecting yaspin>=1.0.0
          Downloading yaspin-2.1.0-py3-none-any.whl (18 kB)
        Collecting sentry-sdk>=1.0.0
          Downloading sentry sdk-1.4.3-py2.py3-none-any.whl (139 kB)
                                       139 kB 108.3 MB/s eta 0:00:01
        Requirement already satisfied: protobuf>=3.12.0 in /opt/conda/lib/python3.8/site-packages (from wandb) (3.17.3)
        Requirement already satisfied: PyYAML in /opt/conda/lib/python3.8/site-packages (from wandb) (5.4.1)
        Collecting pathtools
          Downloading pathtools-0.1.2.tar.gz (11 kB)
        Collecting GitPython>=1.0.0
          Downloading GitPython-3.1.24-py3-none-any.whl (180 kB)
                                               | 180 kB 93.0 MB/s eta 0:00:01
        Requirement already satisfied: python-dateutil>=2.6.1 in /opt/conda/lib/python3.8/site-packages (from wandb) (2.8.2)
```

```
Requirement already satisfied: psutil>=5.0.0 in /opt/conda/lib/python3.8/site-packages (from wandb) (5.8.0)
Requirement already satisfied: six>=1.13.0 in /opt/conda/lib/python3.8/site-packages (from wandb) (1.16.0)
Collecting promise<3,>=2.0
  Downloading promise-2.3.tar.gz (19 kB)
Collecting docker-pycreds>=0.4.0
  Downloading docker pycreds-0.4.0-py2.py3-none-any.whl (9.0 kB)
Collecting configparser>=3.8.1
  Downloading configparser-5.0.2-py3-none-any.whl (19 kB)
Requirement already satisfied: requests<3,>=2.0.0 in /opt/conda/lib/python3.8/site-packages (from wandb) (2.26.0)
Collecting subprocess32>=3.5.3
  Downloading subprocess32-3.5.4.tar.gz (97 kB)
                               97 kB 13.8 MB/s eta 0:00:01
Collecting gitdb<5,>=4.0.1
  Downloading gitdb-4.0.9-py3-none-any.whl (63 kB)
                                      63 kB 3.6 MB/s eta 0:00:01
Requirement already satisfied: typing-extensions>=3.7.4.3 in /opt/conda/lib/python3.8/site-packages (from GitPython>=1.0.
0 = \text{-} \text{-} \text{-} \text{-} \text{-} \text{-} \text{-} (3.10.0.0)
Collecting smmap<6,>=3.0.1
  Downloading smmap-5.0.0-py3-none-any.whl (24 kB)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in /opt/conda/lib/python3.8/site-packages (from requests<3,>=2.0.0->
wandb) (1.26.6)
Requirement already satisfied: charset-normalizer~=2.0.0 in /opt/conda/lib/python3.8/site-packages (from requests<3,>=2.
0.0 - > wandb) (2.0.0)
Requirement already satisfied: certifi>=2017.4.17 in /opt/conda/lib/python3.8/site-packages (from requests<3,>=2.0.0->wan
db) (2021.5.30)
Requirement already satisfied: idna<4,>=2.5 in /opt/conda/lib/python3.8/site-packages (from requests<3,>=2.0.0->wandb)
(3.1)
Collecting termcolor<2.0.0,>=1.1.0
  Downloading termcolor-1.1.0.tar.gz (3.9 kB)
Building wheels for collected packages: promise, subprocess32, termcolor, pathtools
  Building wheel for promise (setup.py) ... done
  Created wheel for promise: filename=promise-2.3-py3-none-any.whl size=21502 sha256=dle96ee754b60142006ae6154cbb03c44a6c
9cadbf09017204c9db40d9f9013b
  Stored in directory: /root/.cache/pip/wheels/54/aa/01/724885182f93150035a2a91bce34a12877e8067a97baaf5dc8
  Building wheel for subprocess32 (setup.py) ... done
  Created wheel for subprocess32: filename=subprocess32-3.5.4-py3-none-any.whl size=6502 sha256=fb42cb5354f07eef2b8aa31ce
727cf7a2d8013842b8bb92b6efa16bc5de809f5
  Stored in directory: /root/.cache/pip/wheels/9f/69/d1/50b39b308a87998eaf5c1d9095e5a5bd2ad98501e2b7936d36
  Building wheel for termcolor (setup.py) ... done
  Created wheel for termcolor: filename=termcolor-1.1.0-py3-none-any.whl size=4847 sha256=bfc0d7aa5b74c50e177c51113c43646
030d2c1f18012183222795f686fb11f87
  Stored in directory: /root/.cache/pip/wheels/a0/16/9c/5473df82468f958445479c59e784896fa24f4a5fc024b0f501
  Building wheel for pathtools (setup.py) ... done
  Created wheel for pathtools: filename=pathtools-0.1.2-py3-none-any.whl size=8807 sha256=94b1cb52dd55d0928a9b7577304cf0a
fa3eb8642e6308e382f3f3f5efab6e669
  Stored in directory: /root/.cache/pip/wheels/4c/8e/7e/72fbc243elaeecae64a96875432e70d4e92f3d2d18123be004
Successfully built promise subprocess32 termcolor pathtools
Installing collected packages: smmap, termcolor, gitdb, yaspin, subprocess32, shortuuid, sentry-sdk, promise, pathtools,
GitPython, docker-pycreds, configparser, wandb
Successfully installed GitPython-3.1.24 configparser-5.0.2 docker-pycreds-0.4.0 gitdb-4.0.9 pathtools-0.1.2 promise-2.3 s
entry-sdk-1.4.3 shortuuid-1.0.1 smmap-5.0.0 subprocess32-3.5.4 termcolor-1.1.0 wandb-0.12.6 yaspin-2.1.0
```

```
e manager. It is recommended to use a virtual environment instead: https://pip.pypa.io/warnings/venv
 In [6]:
          import wandb
          wandb.login()
         wandb: You can find your API key in your browser here: https://wandb.ai/authorize
         wandb: Paste an API key from your profile and hit enter: · · · · · · · ·
         wandb: Appending key for api.wandb.ai to your netrc file: /root/.netrc
Out[6]:
In [7]:
          wandb.init(project="w251-hw9", entity="rochelleli")
         wandb: Currently logged in as: rochelleli (use `wandb login --relogin` to force relogin)
         Syncing run costumed-specter-1 to Weights & Biases (docs).
          Display W&B run
 Out[7]:
 In [8]:
          SEED=1
          random.seed(SEED)
          torch.manual seed(SEED)
          cudnn.deterministic = True
In [9]:
          torch.cuda.device count()
Out[9]:
In [10]:
          START EPOCH = 0
In [14]:
          ARCH = 'resnet18'
          EPOCHS = 2
          LR = 0.1
          MOMENTUM = 0.9
          WEIGHT DECAY = 1e-4
          PRINT FREQ = 10
          TRAIN BATCH=500
          VAL BATCH=500
          WORKERS=2
          TRAINDIR="/home/ubuntu/data/train"
          VALDIR="/home/ubuntu/data/val"
```

WARNING: Running pip as the 'root' user can result in broken permissions and conflicting behaviour with the system packag

```
In [15]: if not torch.cuda.is available():
               print('GPU not detected.. did you pass through your GPU?')
In [16]:
          wandb.init(config={"epochs": EPOCHS, "batch size": TRAIN BATCH, "momentum": MOMENTUM, "WEIGHT DECAY": WEIGHT DECAY, "arc
         Finishing last run (ID:1pgsa3v1) before initializing another...
         Waiting for W&B process to finish, PID 449... (success).
         Synced 5 W&B file(s), 0 media file(s), 0 artifact file(s) and 0 other file(s)
         Synced costumed-specter-1: https://wandb.ai/rochelleli/w251-hw9/runs/1pgsa3v1
         Find logs at: ./wandb/run-20211031 065745-1pgsa3v1/logs
         Successfully finished last run (ID:1pgsa3v1). Initializing new run:
         Syncing run eerie-poltergeist-4 to Weights & Biases (docs).
          Display W&B run
Out[16]:
In [24]:
           GPU = 0
In [25]:
           torch.cuda.set device(GPU)
In [26]:
           global step = 1
In [17]:
           def train(train loader, model, criterion, optimizer, epoch):
               global global step
               batch time = AverageMeter('Time', ':6.3f')
               data time = AverageMeter('Data', ':6.3f')
               losses = AverageMeter('Loss', ':.4e')
               top1 = AverageMeter('Acc@1', ':6.2f')
               top5 = AverageMeter('Acc@5', ':6.2f')
               progress = ProgressMeter(
                   len(train loader),
                   [batch time, data time, losses, top1, top5],
                   prefix="Epoch: [{}]".format(epoch))
               # Grad Scaler
               scaler = GradScaler()
               # switch to train mode
               model.train()
               end = time.time()
```

```
for i, (images, target) in enumerate(train loader):
    # measure data loading time
    data time.update(time.time() - end)
    optimizer.zero grad()
    if GPU is not None:
        images = images.cuda(GPU, non blocking=True)
    if torch.cuda.is available():
        target = target.cuda(GPU, non blocking=True)
    # compute output
   with autocast():
      output = model(images)
      loss = criterion(output, target)
    # measure accuracy and record loss
    acc1, acc5 = accuracy(output, target, topk=(1, 5))
    losses.update(loss.item(), images.size(0))
    top1.update(acc1[0], images.size(0))
    top5.update(acc5[0], images.size(0))
    # compute gradient and do SGD step
    # optimizer.zero grad()
    # loss.backward()
    # optimizer.step()
    # use the scaler
    scaler.scale(loss).backward()
    scaler.step(optimizer)
    scaler.update()
    # measure elapsed time
    batch time.update(time.time() - end)
    end = time.time()
   writer.add scalar("Loss/train", loss, global step = global step)
   writer.add scalar("acc1/train", top1.avg, global step = global step)
   writer.add scalar("acc5/train", top5.avq, global step = global step)
   wandb.log({"Loss/train": loss, 'acc1/train': top1.avq, 'acc5/train': top5.avq})
    global step = global step + 1
    if i % PRINT FREQ == 0:
        progress.display(i)
```

```
def validate(val_loader, model, criterion):
    global global_step
    batch_time = AverageMeter('Time', ':6.3f')
```

```
losses = AverageMeter('Loss', ':.4e')
top1 = AverageMeter('Acc@1', ':6.2f')
top5 = AverageMeter('Acc@5', ':6.2f')
progress = ProgressMeter(
    len(val loader),
    [batch time, losses, top1, top5],
    prefix='Test: ')
# switch to evaluate mode
model.eval()
with torch.no grad():
    end = time.time()
    for i, (images, target) in enumerate(val loader):
        if GPU is not None:
            images = images.cuda(GPU, non blocking=True)
        if torch.cuda.is available():
            target = target.cuda(GPU, non blocking=True)
        # compute output
        output = model(images)
        loss = criterion(output, target)
        # measure accuracy and record loss
        acc1, acc5 = accuracy(output, target, topk=(1, 5))
        losses.update(loss.item(), images.size(0))
        top1.update(acc1[0], images.size(0))
        top5.update(acc5[0], images.size(0))
        # measure elapsed time
        batch time.update(time.time() - end)
        end = time.time()
        if i % PRINT FREQ == 0:
            progress.display(i)
    # TODO: this should also be done with the ProgressMeter
    print(' * Acc@1 {top1.avg:.3f} Acc@5 {top5.avg:.3f}'
          .format(top1=top1, top5=top5))
writer.add scalar("Loss/val", losses.avg, global step = global step)
writer.add scalar("acc1/val", top1.avg, global step = global step)
writer.add scalar("acc5/val", top5.avg, global step = global step)
wandb.log({"Loss/val": losses.avg, 'acc1/val': top1.avg, 'acc5/val': top5.avg})
global step = global step + 1
return top1.avg
```

```
def save_checkpoint(state, is_best, filename='checkpoint.pth.tar'):
    torch.save(state, filename)
    if is_best:
        shutil.copyfile(filename, 'model_best.pth.tar')
```

```
In [20]:
          class AverageMeter(object):
              """Computes and stores the average and current value"""
              def init (self, name, fmt=':f'):
                  self.name = name
                  self.fmt = fmt
                  self.reset()
              def reset(self):
                  self.val = 0
                  self.avg = 0
                  self.sum = 0
                  self.count = 0
              def update(self, val, n=1):
                  self.val = val
                  self.sum += val * n
                  self.count += n
                  self.avg = self.sum / self.count
              def str (self):
                  fmtstr = '{name} {val' + self.fmt + '} ({avg' + self.fmt + '})'
                  return fmtstr.format(**self. dict )
```

```
class ProgressMeter(object):
    def __init__(self, num_batches, meters, prefix=""):
        self.batch_fmtstr = self._get_batch_fmtstr(num_batches)
        self.meters = meters
        self.prefix = prefix

def display(self, batch):
        entries = [self.prefix + self.batch_fmtstr.format(batch)]
        entries += [str(meter) for meter in self.meters]
        print('\t'.join(entries))

def __get_batch_fmtstr(self, num_batches):
        num_digits = len(str(num_batches // 1))
        fmt = '(:' + str(num_digits) + 'd)'
        return '[' + fmt + '/' + fmt.format(num_batches) + ']'
```

```
def adjust_learning_rate(optimizer, epoch):
    """Sets the learning rate to the initial LR decayed by 10 every 30 epochs"""
```

```
for param group in optimizer.param groups:
                  param group['lr'] = lr
In [23]:
          def accuracy(output, target, topk=(1,)):
              """Computes the accuracy over the k top predictions for the specified values of k"""
              with torch.no grad():
                  maxk = max(topk)
                  batch size = target.size(0)
                  _, pred = output.topk(maxk, 1, True, True)
                  pred = pred.t()
                  correct = pred.eq(target.view(1, -1).expand as(pred))
                  res = []
                  for k in topk:
                      correct k = correct[:k].reshape(-1).float().sum(0, keepdim=True)
                      res.append(correct k.mul (100.0 / batch size))
                  return res
In [27]:
          cudnn.benchmark = True
In [28]:
          imagenet mean RGB = [0.47889522, 0.47227842, 0.43047404]
          imagenet std RGB = [0.229, 0.224, 0.225]
In [29]:
          normalize = transforms.Normalize(mean=imagenet mean RGB, std=imagenet std RGB)
In [30]:
          IMG SIZE = 224
          NUM CLASSES = 1000
In [31]:
          model = models. dict [ARCH]()
In [32]:
          inf = model.fc.in features
In [33]:
          model.fc = nn.Linear(inf, NUM CLASSES)
In [34]:
          model.cuda(GPU)
```

lr = LR * (0.1 ** (epoch // 30))

```
Out[34]: ResNet(
           (conv1): Conv2d(3, 64, kernel size=(7, 7), stride=(2, 2), padding=(3, 3), bias=False)
           (bn1): BatchNorm2d(64, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
           (relu): ReLU(inplace=True)
           (maxpool): MaxPool2d(kernel size=3, stride=2, padding=1, dilation=1, ceil mode=False)
           (layer1): Sequential(
             (0): BasicBlock(
               (conv1): Conv2d(64, 64, kernel size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
               (bn1): BatchNorm2d(64, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
               (relu): ReLU(inplace=True)
               (conv2): Conv2d(64, 64, kernel size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
               (bn2): BatchNorm2d(64, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
             (1): BasicBlock(
               (conv1): Conv2d(64, 64, kernel size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
               (bn1): BatchNorm2d(64, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
               (relu): ReLU(inplace=True)
               (conv2): Conv2d(64, 64, kernel size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
               (bn2): BatchNorm2d(64, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
             )
           (layer2): Sequential(
             (0): BasicBlock(
               (conv1): Conv2d(64, 128, kernel size=(3, 3), stride=(2, 2), padding=(1, 1), bias=False)
               (bn1): BatchNorm2d(128, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
               (relu): ReLU(inplace=True)
               (conv2): Conv2d(128, 128, kernel size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
               (bn2): BatchNorm2d(128, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
               (downsample): Sequential(
                 (0): Conv2d(64, 128, kernel size=(1, 1), stride=(2, 2), bias=False)
                 (1): BatchNorm2d(128, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
               )
             (1): BasicBlock(
               (conv1): Conv2d(128, 128, kernel size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
               (bn1): BatchNorm2d(128, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
               (relu): ReLU(inplace=True)
               (conv2): Conv2d(128, 128, kernel size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
               (bn2): BatchNorm2d(128, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
             )
           (layer3): Sequential(
             (0): BasicBlock(
               (conv1): Conv2d(128, 256, kernel size=(3, 3), stride=(2, 2), padding=(1, 1), bias=False)
               (bn1): BatchNorm2d(256, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
               (relu): ReLU(inplace=True)
               (conv2): Conv2d(256, 256, kernel size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
               (bn2): BatchNorm2d(256, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
               (downsample): Sequential(
                 (0): Conv2d(128, 256, kernel size=(1, 1), stride=(2, 2), bias=False)
                 (1): BatchNorm2d(256, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
```

```
)
             (1): BasicBlock(
               (conv1): Conv2d(256, 256, kernel size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
               (bn1): BatchNorm2d(256, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
               (relu): ReLU(inplace=True)
               (conv2): Conv2d(256, 256, kernel size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
               (bn2): BatchNorm2d(256, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
           (layer4): Sequential(
             (0): BasicBlock(
               (conv1): Conv2d(256, 512, kernel size=(3, 3), stride=(2, 2), padding=(1, 1), bias=False)
               (bn1): BatchNorm2d(512, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
               (relu): ReLU(inplace=True)
               (conv2): Conv2d(512, 512, kernel size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
               (bn2): BatchNorm2d(512, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
               (downsample): Sequential(
                 (0): Conv2d(256, 512, kernel size=(1, 1), stride=(2, 2), bias=False)
                 (1): BatchNorm2d(512, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
             (1): BasicBlock(
               (conv1): Conv2d(512, 512, kernel size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
               (bn1): BatchNorm2d(512, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
               (relu): ReLU(inplace=True)
               (conv2): Conv2d(512, 512, kernel size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
               (bn2): BatchNorm2d(512, eps=1e-05, momentum=0.1, affine=True, track running stats=True)
           (avgpool): AdaptiveAvgPool2d(output size=(1, 1))
           (fc): Linear(in features=512, out features=1000, bias=True)
In [35]:
          criterion = nn.CrossEntropyLoss().cuda(GPU)
In [36]:
          optimizer = torch.optim.SGD(model.parameters(), LR,
                                           momentum=MOMENTUM,
                                           weight decay=WEIGHT DECAY)
In [37]:
          scheduler = torch.optim.lr scheduler.CosineAnnealingLR(optimizer, T max=EPOCHS)
In [38]:
          transform train = transforms.Compose([
              transforms.Resize((256,256)),
              transforms.RandomCrop(IMG SIZE, padding=4),
              transforms.RandomHorizontalFlip(),
```

```
transforms.ToTensor(),
              transforms.Normalize(imagenet mean RGB, imagenet std RGB),
          ])
In [40]:
          train dataset = datasets.ImageFolder(
              TRAINDIR, transform=transform train)
In [41]:
          transform val = transforms.Compose([
              transforms.Resize((256,256)),
              transforms.RandomCrop(IMG_SIZE, padding=4),
              transforms.ToTensor(),
              transforms.Normalize(imagenet mean RGB, imagenet std RGB),
          ])
In [42]:
          val dataset = datasets.ImageFolder(
              VALDIR, transform=transform val)
In [43]:
          train loader = torch.utils.data.DataLoader(
                  train dataset, batch size=TRAIN BATCH, shuffle=True,
                  num workers=WORKERS, pin memory=True, sampler=None)
In [44]:
          val loader = torch.utils.data.DataLoader(
                  val_dataset, batch_size=VAL_BATCH, shuffle=False,
                  num workers=WORKERS, pin memory=True, sampler=None)
In [45]:
          best acc1 = 0
In [46]:
          for epoch in range(START EPOCH, 2):
               adjust learning rate(optimizer, epoch)
              # train for one epoch
              train(train loader, model, criterion, optimizer, epoch)
              # evaluate on validation set
              acc1 = validate(val loader, model, criterion)
              # remember best acc@1 and save checkpoint
              is best = acc1 > best acc1
              best acc1 = max(acc1, best acc1)
```

```
save checkpoint({
         'epoch': epoch + 1,
        'arch': ARCH,
        'state dict': model.state dict(),
        'best acc1': best acc1,
        'optimizer' : optimizer.state dict(),
    }, is best)
    scheduler.step()
    print('lr: ' + str(scheduler.get last lr()[0]))
    writer.add scalar("lr", scheduler.get last lr()[0], global step = global step)
    wandb.log({'lr': scheduler.get last lr()[0]})
Epoch: [0][
             0/25631
                       Time 15.712 (15.712)
                                               Data 4.016 ( 4.016)
                                                                      Loss 7.0163e+00 (7.0163e+00)
                                                                                                      Acc@1
                                                                                                              0.20 (
0.20)
       Acc@5
               0.60 (
                       0.60)
Epoch: [0][ 10/2563]
                       Time 0.738 ( 2.468)
                                               Data 0.095 ( 0.803)
                                                                      Loss 7.0141e+00 (6.9886e+00)
                                                                                                      Acc@1
                                                                                                              0.40 (
       Acc@5 1.40 (
0.09)
                       0.69)
Epoch: [0][ 20/2563]
                       Time 0.816 ( 2.069)
                                               Data 0.170 ( 0.884)
                                                                      Loss 7.0331e+00 (7.0013e+00)
                                                                                                      Acc@1
                                                                                                              0.20 (
       Acc@5
0.18)
              0.60 (
                       0.78)
Epoch: [0][ 30/2563]
                       Time 1.625 ( 1.966)
                                               Data 0.979 ( 0.955)
                                                                      Loss 6.8999e+00 (6.9824e+00)
                                                                                                      Acc@1
                                                                                                              0.00 (
0.24)
       Acc@5 1.60 (
                       0.97)
Epoch: [0][ 40/2563]
                       Time 1.480 ( 1.876)
                                               Data 0.830 ( 0.953)
                                                                      Loss 6.8295e+00 (6.9551e+00)
                                                                                                      Acc@1
                                                                                                              0.20 (
0.28) Acc@5 1.40 (
                       1.13)
Epoch: [0][ 50/2563]
                       Time 1.775 ( 1.849)
                                               Data 1.128 ( 0.979)
                                                                      Loss 6.7658e+00 (6.9228e+00)
                                                                                                      Acc@1
                                                                                                              0.00 (
0.31)
       Acc@5 1.20 ( 1.29)
                                                                                                              0.40 (
Epoch: [0][ 60/2563]
                       Time 1.806 ( 1.806)
                                               Data 1.156 ( 0.972)
                                                                      Loss 6.6769e+00 (6.8872e+00)
                                                                                                      Acc@1
0.38)
       Acc@5 3.40 (
                       1.56)
                       Time 1.765 ( 1.783)
Epoch: [0][ 70/2563]
                                               Data 1.114 ( 0.975)
                                                                                                      Acc@1
                                                                                                              0.20 (
                                                                      Loss 6.6679e+00 (6.8563e+00)
0.39)
       Acc@5 2.80 (
                       1.68)
                       Time 1.839 ( 1.762)
Epoch: [0][ 80/2563]
                                               Data 1.185 ( 0.973)
                                                                      Loss 6.5323e+00 (6.8242e+00)
                                                                                                      Acc@1
                                                                                                              1.40 (
0.41)
       Acc@5 3.40 (
                      1.83)
Epoch: [0][ 90/2563]
                       Time 1.879 (1.751)
                                               Data 1.224 ( 0.977)
                                                                      Loss 6.5566e+00 (6.7969e+00)
                                                                                                      Acc@1
                                                                                                              1.00 (
0.44)
       Acc@5 2.80 (
                      1.96)
                                               Data 1.412 ( 0.977)
                                                                                                      Acc@1
                                                                                                              0.20 (
Epoch: [0][ 100/2563]
                       Time 2.071 (1.739)
                                                                      Loss 6.5304e+00 (6.7686e+00)
0.46)
       Acc@5 2.40 (
                       2.08)
Epoch: [0][ 110/2563]
                       Time 2.194 ( 1.738)
                                               Data 1.534 ( 0.984)
                                                                      Loss 6.4966e+00 (6.7412e+00)
                                                                                                      Acc@1
                                                                                                              1.00 (
0.52)
       Acc@5
               3.40 (
                       2.28)
Epoch: [0][ 120/2563]
                       Time 2.661 (1.729)
                                               Data 1.963 ( 0.982)
                                                                                                      Acc@1
                                                                                                              1.00 (
                                                                      Loss 6.4257e+00 (6.7136e+00)
0.56) Acc@5
               4.20 (
                       2.43)
                       Time 2.458 (1.722)
                                               Data 1.785 ( 0.981)
                                                                                                      Acc@1
                                                                                                              1.60 (
Epoch: [0][ 130/2563]
                                                                      Loss 6.3550e+00 (6.6890e+00)
0.62) Acc@5
              4.40 (
                       2.59)
Epoch: [0][ 140/2563]
                       Time 2.268 (1.711)
                                               Data 1.604 ( 0.976)
                                                                      Loss 6.2774e+00 (6.6635e+00)
                                                                                                      Acc@1
                                                                                                              0.80 (
0.68)
      Acc@5
              5.40 (
                       2.77)
Epoch: [0][ 150/2563]
                       Time 2.183 ( 1.706)
                                               Data 1.524 ( 0.975)
                                                                      Loss 6.3094e+00 (6.6417e+00)
                                                                                                      Acc@1
                                                                                                              0.40 (
0.72)
       Acc@5
              2.60 (
                       2.91)
Epoch: [0][ 160/2563]
                       Time 2.186 ( 1.704)
                                               Data 1.524 ( 0.977)
                                                                      Loss 6.3103e+00 (6.6182e+00)
                                                                                                      Acc@1
                                                                                                              1.60 (
0.76)
       Acc@5 5.00 (
                       3.06)
Epoch: [0][ 170/2563]
                       Time 2.116 ( 1.697)
                                               Data 1.452 ( 0.973)
                                                                      Loss 6.1483e+00 (6.5953e+00)
                                                                                                      Acc@1
                                                                                                              2.40 (
```

```
0.81)
       Acc@5
              4.80 (
                       3.20)
Epoch: [0][ 180/2563]
                       Time 2.564 (1.692)
                                               Data 1.871 ( 0.972)
                                                                       Loss 6.0714e+00 (6.5710e+00)
                                                                                                      Acc@1
                                                                                                              2.60 (
0.86)
       Acc@5
                       3.35)
               6.00 (
Epoch: [0][ 190/2563]
                       Time 2.348 (1.693)
                                               Data 1.681 ( 0.976)
                                                                       Loss 6.0891e+00 (6.5489e+00)
                                                                                                      Acc@1
                                                                                                              2.00 (
       Acc@5
0.93)
               8.80 (
                       3.52)
Epoch: [0][ 200/2563]
                       Time 1.685 ( 1.688)
                                               Data 1.020 ( 0.973)
                                                                       Loss 6.0037e+00 (6.5260e+00)
                                                                                                      Acc@1
                                                                                                              2.00 (
1.00)
       Acc@5
               6.60 (
                       3.69)
Epoch: [0][ 210/2563]
                       Time 2.203 (1.691)
                                               Data 1.538 ( 0.979)
                                                                       Loss 6.0623e+00 (6.5038e+00)
                                                                                                      Acc@1
                                                                                                              1.80 (
1.06)
       Acc@5
              5.60 (
                       3.87)
Epoch: [0][ 220/2563]
                       Time 2.557 (1.689)
                                               Data 1.844 ( 0.978)
                                                                       Loss 6.1123e+00 (6.4836e+00)
                                                                                                      Acc@1
                                                                                                              2.80 (
1.12)
       Acc@5 7.60 (
                       4.03)
Epoch: [0][ 230/2563]
                       Time 3.219 (1.689)
                                               Data 2.511 ( 0.980)
                                                                       Loss 6.0717e+00 (6.4632e+00)
                                                                                                      Acc@1
                                                                                                              2.00 (
1.19)
       Acc@5
              8.00 (
                       4.22)
Epoch: [0][ 240/2563]
                       Time 1.383 (1.685)
                                               Data 0.716 ( 0.978)
                                                                       Loss 6.0003e+00 (6.4416e+00)
                                                                                                      Acc@1
                                                                                                              3.40 (
1.26)
       Acc@5
               7.20 (
                       4.40)
Epoch: [0][ 250/2563]
                       Time 1.647 (1.686)
                                               Data 0.983 ( 0.980)
                                                                       Loss 5.8504e+00 (6.4208e+00)
                                                                                                      Acc@1
                                                                                                              1.80 (
1.32)
       Acc@5 9.40 (
                       4.56)
                                               Data 0.803 ( 0.980)
                                                                       Loss 6.0090e+00 (6.4020e+00)
                                                                                                      Acc@1
                                                                                                              2.40 (
Epoch: [0][ 260/2563]
                       Time 1.466 (1.684)
1.37)
       Acc@5
               8.80 (
                       4.71)
                                               Data 0.726 ( 0.980)
                                                                                                      Acc@1
                                                                                                              3.00 (
Epoch: [0][ 270/2563]
                       Time 1.392 ( 1.682)
                                                                       Loss 5.8805e+00 (6.3829e+00)
1.41)
       Acc@5 9.40 (
                       4.86)
                       Time 1.867 (1.679)
                                               Data 1.199 ( 0.978)
                                                                       Loss 5.7891e+00 (6.3651e+00)
                                                                                                      Acc@1
                                                                                                              3.20 (
Epoch: [0][ 280/2563]
1.46)
       Acc@5 10.20 (
                       5.02)
                                                                                                              2.40 (
Epoch: [0][ 290/2563]
                       Time 1.588 ( 1.677)
                                               Data 0.922 ( 0.977)
                                                                       Loss 5.7527e+00 (6.3461e+00)
                                                                                                      Acc@1
1.50)
       Acc@5 8.40 (
                       5.18)
Epoch: [0][ 300/2563]
                       Time 1.797 ( 1.679)
                                               Data 1.131 ( 0.980)
                                                                       Loss 5.7673e+00 (6.3285e+00)
                                                                                                      Acc@1
                                                                                                              2.40 (
1.53)
       Acc@5 10.20 (
                       5.33)
Epoch: [0][ 310/2563]
                       Time 1.783 ( 1.676)
                                               Data 1.119 ( 0.978)
                                                                       Loss 5.7675e+00 (6.3109e+00)
                                                                                                      Acc@1
                                                                                                              3.40 (
1.58)
       Acc@5
              9.80 (
                       5.49)
Epoch: [0][ 320/2563]
                       Time 1.655 ( 1.676)
                                               Data 0.987 ( 0.979)
                                                                       Loss 5.7228e+00 (6.2932e+00)
                                                                                                      Acc@1
                                                                                                              3.00 (
1.64)
       Acc@5 12.40 (
                       5.67)
Epoch: [0][ 330/2563]
                       Time 1.986 (1.674)
                                               Data 1.318 ( 0.978)
                                                                       Loss 5.6598e+00 (6.2752e+00)
                                                                                                      Acc@1
                                                                                                              2.80 (
1.69) Acc@5 10.80 (
                       5.84)
Epoch: [0][ 340/2563]
                       Time 2.105 ( 1.675)
                                               Data 1.440 ( 0.979)
                                                                       Loss 5.6638e+00 (6.2581e+00)
                                                                                                      Acc@1
                                                                                                              3.00 (
1.75) Acc@5 10.80 (
                       6.02)
Epoch: [0][ 350/2563]
                       Time 2.329 (1.672)
                                               Data 1.661 ( 0.977)
                                                                       Loss 5.6772e+00 (6.2418e+00)
                                                                                                      Acc@1
                                                                                                              4.80 (
1.81)
      Acc@5 12.80 (
                       6.18)
Epoch: [0][ 360/2563]
                       Time 2.129 ( 1.672)
                                               Data 1.465 ( 0.978)
                                                                       Loss 5.6808e+00 (6.2250e+00)
                                                                                                      Acc@1
                                                                                                              3.20 (
1.87)
       Acc@5 12.60 (
                       6.37)
                                                                                                              2.60 (
Epoch: [0][ 370/2563]
                       Time 2.424 ( 1.671)
                                               Data 1.758 ( 0.977)
                                                                       Loss 5.7126e+00 (6.2088e+00)
                                                                                                      Acc@1
1.92)
       Acc@5 11.20 (
                       6.55)
Epoch: [0][ 380/2563]
                       Time 2.427 (1.669)
                                               Data 1.758 ( 0.976)
                                                                       Loss 5.6815e+00 (6.1928e+00)
                                                                                                      Acc@1
                                                                                                              6.00 (
1.99)
       Acc@5 14.00 (
                       6.73)
Epoch: [0][ 390/2563]
                       Time 1.993 ( 1.669)
                                               Data 1.326 ( 0.977)
                                                                       Loss 5.6478e+00 (6.1777e+00)
                                                                                                      Acc@1
                                                                                                              3.40 (
2.03)
       Acc@5 10.60 (
                       6.88)
Epoch: [0][ 400/2563]
                       Time 3.335 (1.671)
                                               Data 2.601 (0.979)
                                                                       Loss 5.4771e+00 (6.1620e+00)
                                                                                                      Acc@1
                                                                                                              4.80 (
2.09)
       Acc@5 14.40 (
                       7.05)
Epoch: [0][ 410/2563]
                       Time 2.513 ( 1.669)
                                               Data 1.800 ( 0.978)
                                                                       Loss 5.4550e+00 (6.1467e+00)
                                                                                                      Acc@1
                                                                                                              5.00 (
2.13)
       Acc@5 14.40 (
                       7.21)
Epoch: [0][ 420/2563]
                       Time 2.316 ( 1.666)
                                               Data 1.651 ( 0.975)
                                                                       Loss 5.5511e+00 (6.1310e+00)
                                                                                                      Acc@1
                                                                                                              5.00 (
2.20)
       Acc@5 14.00 (
                       7.39)
```

Epoch: [0][430/2563]	Time 1.814 (1.6	666) Data	1.150 (0.976)	Loss 5.3799e+00 (6.1151e+00)	Acc@1	5.20 (
2.27) Acc@5 16.00 (7.58)					
Epoch: [0][440/2563]	Time 2.239 (1.6	65) Data	1.574 (0.975)	Loss 5.4187e+00 (6.1005e+00)	Acc@1	5.80 (
2.34) Acc@5 16.20 (•					
Epoch: [0][450/2563]	Time 1.887 (1.6	66) Data	1.222 (0.976)	Loss 5.4137e+00 (6.0851e+00)	Acc@1	5.20 (
2.40) Acc@5 17.00 (7.95)					
Epoch: [0][460/2563]	Time 1.968 (1.6	65) Data	1.301 (0.976)	Loss 5.4173e+00 (6.0706e+00)	Acc@1	6.20 (
2.46) Acc@5 17.00 (8.12)					
Epoch: [0][470/2563]	Time 1.966 (1.6	65) Data	1.301 (0.976)	Loss 5.2361e+00 (6.0565e+00)	Acc@1	5.80 (
2.52) Acc@5 19.60 (8.29)					
Epoch: [0][480/2563]	Time 1.613 (1.6	65) Data	0.948 (0.977)	Loss 5.2176e+00 (6.0416e+00)	Acc@1	6.00 (
2.59) Acc@5 18.80 (8.46)					
Epoch: [0][490/2563]	Time 1.245 (1.6	62) Data	0.578 (0.975)	Loss 5.3641e+00 (6.0272e+00)	Acc@1	5.60 (
2.67) Acc@5 16.80 (8.65)					
Epoch: [0][500/2563]	Time 1.739 (1.6	64) Data	1.073 (0.976)	Loss 5.3415e+00 (6.0128e+00)	Acc@1	7.20 (
2.73) Acc@5 19.40 (-					
Epoch: [0][510/2563]	Time 1.557 (1.6	63) Data	0.890 (0.976)	Loss 5.3418e+00 (5.9981e+00)	Acc@1	5.80 (
2.80) Acc@5 16.80 (-					
Epoch: [0][520/2563]	Time 1.449 (1.6	63) Data	0.784 (0.977)	Loss 5.1992e+00 (5.9850e+00)	Acc@1	4.80 (
2.85) Acc@5 18.60 (-					
Epoch: [0][530/2563]	Time 1.272 (1.6	61) Data	0.601 (0.975)	Loss 5.1796e+00 (5.9712e+00)	Acc@1	7.20 (
2.92) Acc@5 21.20 (•					
Epoch: [0][540/2563]	Time 2.010 (1.6	62) Data	1.343 (0.976)	Loss 5.2578e+00 (5.9585e+00)	Acc@1	6.40 (
2.98) Acc@5 19.60 (-	(C1) D. I.	0 070 / 0 075	T	3 01	F 60 /
Epoch: [0][550/2563]	Time 1.639 (1.6	obl) Data	0.972 (0.975)	Loss 5.2618e+00 (5.9460e+00)	Acc@1	5.60 (
3.03) Acc@5 20.40 (Epoch: [0][560/2563]	-	(60) Data	1.164 (0.975)	Togg E 25020100 /5 02270100\	7.0001	6.80 (
3.09) Acc@5 20.60 (Time 1.831 (1.6	Data	1.104 (0.975)	Loss 5.2582e+00 (5.9337e+00)	Acc@1	0.00 (
Epoch: [0][570/2563]	Time 2.113 (1.6	.61) Da+a	1.447 (0.977)	Loss 5.1976e+00 (5.9206e+00)	Acc@1	7.40 (
3.16) Acc@5 20.20 (oi) Data	. 1.447 (0.5777)	Loss 3:17/0e/00 (3:7200e/00)	ACCEI	7.40 (
Epoch: [0][580/2563]	•	i61) Data	1.714 (0.976)	Loss 5.2602e+00 (5.9078e+00)	Acc@1	6.80 (
3.21) Acc@5 19.20 (•	201)	10,11 (000,0)	2022 3120020.00 (3130700.00)	110001	0.00 (
Epoch: [0][590/2563]	•	61) Data	1.806 (0.977)	Loss 5.1259e+00 (5.8952e+00)	Acc@1	8.20 (
3.27) Acc@5 22.00 ((
Epoch: [0][600/2563]	•	60) Data	1.740 (0.976)	Loss 5.1782e+00 (5.8829e+00)	Acc@1	8.40 (
3.33) Acc@5 21.40 (,	,	,		`
Epoch: [0][610/2563]	Time 2.418 (1.6	559) Data	1.751 (0.975)	Loss 5.2022e+00 (5.8709e+00)	Acc@1	6.80 (
3.39) Acc@5 17.60 (10.66)	·				
Epoch: [0][620/2563]	Time 2.212 (1.6	62) Data	1.548 (0.978)	Loss 5.2333e+00 (5.8593e+00)	Acc@1	7.20 (
3.45) Acc@5 18.20 (10.81)					
Epoch: [0][630/2563]	Time 1.932 (1.6	61) Data	1.269 (0.978)	Loss 5.2023e+00 (5.8479e+00)	Acc@1	7.80 (
3.52) Acc@5 19.40 (10.96)					
Epoch: [0][640/2563]	Time 1.783 (1.6	62) Data	1.118 (0.979)	Loss 5.1473e+00 (5.8362e+00)	Acc@1	7.20 (
3.57) Acc@5 23.40 (11.12)					
Epoch: [0][650/2563]	Time 1.231 (1.6	60) Data	0.565 (0.977)	Loss 5.0663e+00 (5.8247e+00)	Acc@1	8.20 (
3.63) Acc@5 20.20 (•					
Epoch: [0][660/2563]	Time 1.692 (1.6	61) Data	1.029 (0.978)	Loss 5.0788e+00 (5.8140e+00)	Acc@1	7.60 (
3.69) Acc@5 22.00 (•					
Epoch: [0][670/2563]	Time 0.756 (1.6	660) Data	0.093 (0.978)	Loss 5.0994e+00 (5.8024e+00)	Acc@1	8.80 (
3.75) Acc@5 20.60 (•				_	
Epoch: [0][680/2563]	Time 0.822 (1.6	59) Data	0.154 (0.977)	Loss 5.0015e+00 (5.7910e+00)	Acc@1	7.00 (

```
3.82)
      Acc@5 24.20 ( 11.73)
Epoch: [0][ 690/2563]
                      Time 1.249 (1.660)
                                              Data 0.584 ( 0.978)
                                                                     Loss 5.0175e+00 (5.7797e+00)
                                                                                                    Acc@1
                                                                                                            7.60 (
       Acc@5 23.40 ( 11.90)
3.88)
Epoch: [0][ 700/2563]
                      Time 1.291 (1.660)
                                              Data 0.621 ( 0.977)
                                                                     Loss 5.0960e+00 (5.7690e+00)
                                                                                                    Acc@1
                                                                                                            8.20 (
       Acc@5 21.00 ( 12.04)
3.95)
Epoch: [0][ 710/2563]
                      Time 1.171 ( 1.661)
                                              Data 0.504 ( 0.979)
                                                                     Loss 5.0522e+00 (5.7580e+00)
                                                                                                    Acc@1
                                                                                                            8.00 (
4.02)
       Acc@5 20.40 ( 12.19)
Epoch: [0][ 720/2563]
                      Time 1.562 (1.660)
                                              Data 0.895 ( 0.978)
                                                                     Loss 4.9474e+00 (5.7473e+00)
                                                                                                    Acc@1
                                                                                                            8.80 (
4.08)
       Acc@5 25.00 ( 12.34)
Epoch: [0][ 730/2563]
                      Time 1.977 ( 1.660)
                                              Data 1.311 ( 0.979)
                                                                     Loss 5.0513e+00 (5.7367e+00)
                                                                                                    Acc@1
                                                                                                            8.00 (
4.14)
       Acc@5 23.00 ( 12.50)
Epoch: [0][ 740/2563]
                      Time 1.792 ( 1.660)
                                              Data 1.125 ( 0.979)
                                                                                                    Acc@1 11.40 (
                                                                     Loss 5.0149e+00 (5.7262e+00)
4.20)
     Acc@5 24.80 ( 12.65)
Epoch: [0][ 750/2563]
                      Time 2.008 (1.660)
                                              Data 1.339 ( 0.979)
                                                                     Loss 4.8676e+00 (5.7149e+00)
                                                                                                    Acc@1 11.20 (
4.28) Acc@5 26.20 (12.81)
Epoch: [0][ 760/2563] Time 1.775 (1.661)
                                              Data 1.107 ( 0.979)
                                                                     Loss 5.0174e+00 (5.7046e+00)
                                                                                                    Acc@1 10.40 (
4.34) Acc@5 25.00 (12.96)
                      Time 1.937 ( 1.660)
                                              Data 1.269 ( 0.979)
Epoch: [0][ 770/2563]
                                                                     Loss 4.9143e+00 (5.6939e+00)
                                                                                                    Acc@1 11.40 (
       Acc@5 26.20 ( 13.11)
Epoch: [0][ 780/2563]
                      Time 2.441 ( 1.660)
                                              Data 1.774 ( 0.980)
                                                                     Loss 5.0148e+00 (5.6837e+00)
                                                                                                    Acc@1
                                                                                                            8.20 (
4.48)
      Acc@5 23.80 ( 13.26)
                      Time 2.338 (1.659)
                                              Data 1.676 ( 0.979)
                                                                     Loss 4.8827e+00 (5.6731e+00)
                                                                                                    Acc@1
                                                                                                            9.60 (
Epoch: [0][ 790/2563]
4.55)
      Acc@5 27.20 ( 13.42)
                      Time 2.297 ( 1.659)
Epoch: [0][ 800/2563]
                                              Data 1.629 ( 0.979)
                                                                     Loss 4.7108e+00 (5.6631e+00)
                                                                                                    Acc@1 11.20 (
      Acc@5 26.80 ( 13.56)
4.60)
Epoch: [0][ 810/2563]
                      Time 2.125 ( 1.659)
                                              Data 1.461 ( 0.979)
                                                                     Loss 4.9814e+00 (5.6532e+00)
                                                                                                    Acc@1
                                                                                                            8.60 (
      Acc@5 23.00 ( 13.71)
4.67)
Epoch: [0][ 820/2563]
                      Time 1.775 ( 1.658)
                                              Data 1.108 ( 0.978)
                                                                     Loss 4.9274e+00 (5.6437e+00)
                                                                                                    Acc@1
                                                                                                            9.60 (
4.74) Acc@5 25.40 (13.85)
Epoch: [0][ 830/2563]
                      Time 2.344 ( 1.659)
                                              Data 1.691 ( 0.979)
                                                                     Loss 4.7979e+00 (5.6335e+00)
                                                                                                    Acc@1
                                                                                                            9.20 (
4.81) Acc@5 26.20 (14.00)
Epoch: [0][ 840/2563]
                      Time 1.750 ( 1.658)
                                              Data 1.106 ( 0.978)
                                                                     Loss 4.8107e+00 (5.6235e+00)
                                                                                                    Acc@1
                                                                                                            7.60 (
4.87) Acc@5 24.20 ( 14.14)
Epoch: [0][ 850/2563]
                      Time 1.489 (1.657)
                                              Data 0.849 ( 0.978)
                                                                     Loss 4.6643e+00 (5.6134e+00)
                                                                                                    Acc@1 10.20 (
4.94) Acc@5 25.60 ( 14.29)
Epoch: [0][ 860/2563]
                      Time 1.532 (1.658)
                                              Data 0.896 ( 0.979)
                                                                     Loss 4.6555e+00 (5.6038e+00)
                                                                                                    Acc@1 12.60 (
5.00) Acc@5 28.60 ( 14.43)
Epoch: [0][ 870/2563]
                      Time 2.392 (1.658)
                                              Data 1.755 ( 0.979)
                                                                     Loss 4.8971e+00 (5.5944e+00)
                                                                                                    Acc@1 12.40 (
5.06) Acc@5 25.80 ( 14.57)
Epoch: [0][ 880/2563]
                      Time 2.329 (1.658)
                                              Data 1.693 ( 0.980)
                                                                     Loss 4.7383e+00 (5.5846e+00)
                                                                                                    Acc@1 11.80 (
5.13) Acc@5 28.20 ( 14.72)
Epoch: [0][ 890/2563]
                      Time 1.769 (1.657)
                                              Data 1.133 ( 0.979)
                                                                     Loss 4.8191e+00 (5.5745e+00)
                                                                                                    Acc@1 11.00 (
5.21) Acc@5 25.80 ( 14.87)
Epoch: [0][ 900/2563]
                      Time 1.612 ( 1.656)
                                              Data 0.975 ( 0.979)
                                                                                                    Acc@1 13.40 (
                                                                     Loss 4.5753e+00 (5.5646e+00)
5.28) Acc@5 31.40 ( 15.03)
Epoch: [0][ 910/2563]
                      Time 1.927 (1.656)
                                              Data 1.289 ( 0.980)
                                                                     Loss 4.7023e+00 (5.5551e+00)
                                                                                                    Acc@1
                                                                                                            9.60 (
5.34) Acc@5 27.80 ( 15.17)
Epoch: [0][ 920/2563]
                      Time 1.642 ( 1.656)
                                              Data 1.009 ( 0.979)
                                                                     Loss 4.5928e+00 (5.5459e+00)
                                                                                                    Acc@1 14.60 (
5.41) Acc@5 31.60 ( 15.32)
Epoch: [0][ 930/2563] Time 1.250 (1.656)
                                              Data 0.611 ( 0.981)
                                                                                                    Acc@1
                                                                                                            9.40 (
                                                                     Loss 4.5639e+00 (5.5367e+00)
5.47) Acc@5 26.20 ( 15.46)
```

	[0][940/2563]		1.513	(1.655)	Data	0.876 (0.980)	Loss 4.6244e+00	(5.5273e+00)	Acc@1	12.80 (
•	Acc@5 32.60 (•								
_	[0][950/2563]		1.662	(1.655)	Data	1.026 (0.980)	Loss 4.7114e+00	(5.5182e+00)	Acc@1	10.40 (
•	Acc@5 26.40 (•								
_	[0][960/2563]		1.923	(1.655)	Data	1.287 (0.980)	Loss 4.5753e+00	(5.5092e+00)	Acc@1	13.20 (
,	Acc@5 30.20 (,								
_	[0][970/2563]		1.653	(1.654)	Data	1.015 (0.980)	Loss 4.6537e+00	(5.5001e+00)	Acc@1	12.00 (
•	Acc@5 26.60 (.=	- 04	
_	[0][980/2563]		2.188	(1.655)	Data	1.549 (0.981)	Loss 4.6582e+00	(5.4912e+00)	Acc@1	11.80 (
,	Acc@5 31.20 (,						.=	- 04	
_	[0][990/2563]		2.2/4	(1.654)	Data	1.634 (0.981)	Loss 4.7361e+00	(5.4825e+00)	Acc@1	9.80 (
,	Acc@5 27.40 (,	2 205	. 1 (5.4)	D. I.	1 744 (0 000)	T 4 FO14 OO	(F. 472F . 100)	3 0 1	10 10 1
_	[0][1000/2563]		2.385 ((1.654)	рата	1.744 (0.980)	Loss 4.5814e+00	(5.4/35e+00)	ACC@1	12.40 (
•	Acc@5 31.00 (2 1/1 /	1 654)	Data	1 406 (0 000)	Togg 4 E7620100	(F 46470100)	70001	10 60 (
_	[0][1010/2563] Acc@5 33.00 (Z.141 ((1.054)	Data	1.496 (0.980)	Loss 4.5763e+00	(3.464/6+00)	ACCEI	10.60 (
	[0][1020/2563]		1 065	1 654)	Data	1.220 (0.981)	Loss 4.6481e+00	(5 4562a±00)	70001	13.60 (
-	Acc@5 30.20 (1.005	(1.054)	Data	1.220 (0.961)	LOSS 4.0461E+00	(3.43020+00)	ACCEI	13.00 (
,	[0][1030/2563]	,	1 9/11	1 653)	Da+a	1.293 (0.981)	Loss 4.4861e+00	(5 44780+00)	Acc 0 1	12.00 (
_	Acc@5 30.00 (1.741	(1.055)	Data	1.275 (0.701)	TOSS 4.40016.00	(3.44/00/00)	ACCEI	12.00 (
,	[0][1040/2563]	,	1.542	(1.653)	Data	0.894 (0.981)	Loss 4.6175e+00	(5.4393e+00)	Acc@1	12.00 (
_	Acc@5 29.40 (1.512	(1.055)	Daca	0.031 (0.301)	1.01736.00	(3.13)36.00)	110001	12.00 (
,	[0][1050/2563]	,	1,435	(1.653)	Data	0.787 (0.980)	Loss 4.5546e+00	(5.4309e+00)	Acc@1	10.20 (
-	Acc@5 31.80 ((1,000)	20.00	(00000)		(0010000)	110001	(
•	[0][1060/2563]	•	1.149	1.653)	Data	0.497 (0.981)	Loss 4.4541e+00	(5.4218e+00)	Acc@1	14.80 (
_	Acc@5 33.20 (,		, ,		(
•	[0][1070/2563]	•	0.996	(1.652)	Data	0.346 (0.980)	Loss 4.4926e+00	(5.4132e+00)	Acc@1	13.00 (
_	Acc@5 33.20 (·		,		,		`
Epoch:	[0][1080/2563]	Time	0.753	(1.651)	Data	0.101 (0.980)	Loss 4.4187e+00	(5.4048e+00)	Acc@1	15.00 (
6.45)	Acc@5 33.00 (17.52)								
Epoch:	[0][1090/2563]	Time	0.930	(1.652)	Data	0.274 (0.980)	Loss 4.6871e+00	(5.3965e+00)	Acc@1	11.80 (
6.52)	Acc@5 30.80 (17.66)								
Epoch:	[0][1100/2563]	Time	0.755	(1.652)	Data	0.097 (0.980)	Loss 4.4457e+00	(5.3884e+00)	Acc@1	16.20 (
6.60)	Acc@5 33.20 (17.80)								
_	[0][1110/2563]		1.073	(1.651)	Data	0.413 (0.980)	Loss 4.4673e+00	(5.3795e+00)	Acc@1	14.40 (
,	Acc@5 32.20 (,								
Epoch:	[0][1120/2563]	Time	0.795	(1.651)	Data	0.139 (0.979)	Loss 4.4549e+00	(5.3714e+00)	Acc@1	13.40 (
	Acc@5 33.60 (
_			1.198	(1.651)	Data	0.541 (0.980)	Loss 4.4523e+00	(5.3630e+00)	Acc@1	14.60 (
•	Acc@5 31.60 (•								
-	[0][1140/2563]		1.132	(1.651)	Data	0.474 (0.979)	Loss 4.3032e+00	(5.3548e+00)	Acc@1	16.60 (
	Acc@5 36.40 (•								
_	[0][1150/2563]		1.734	(1.652)	Data	1.075 (0.980)	Loss 4.4417e+00	(5.3470e+00)	Acc@1	13.20 (
•	Acc@5 31.00 (•								
-	[0][1160/2563]		1.512	(1.651)	Data	0.852 (0.980)	Loss 4.4288e+00	(5.3387e+00)	Acc@1	14.80 (
•	Acc@5 32.80 (1 221	. 1 (51)	D	0 646 / 0 000	T	(F 2207 : 22)	3 . 04	15 40 4
-	[0][1170/2563]		1.301 ((1.651)	Data	0.646 (0.980)	Loss 4.4443e+00	(5.330/e+00)	ACC@1	15.40 (
	Acc@5 35.20 (•	1 753	, 1 (51)	D-1:	1 005 (0 000)	T000 4 0005 100	/E 2227-1225	7 0 1	10 60 4
_	[0][1180/2563]		1./53 ((1.651)	раtа	1.095 (0.980)	Loss 4.2035e+00	(5.322/e+00)	ACC@ I	18.60 (
	Acc@5 39.40 (•	1 170	1 (51)	Dot -	0 E21 (0 000)	Togg / 01(F-+00	/E 21//Caloox	701	15 00 (
Epocn:	[0][1190/2563]	TIME	1.1/9	(1.651)	שata	0.521 (0.980)	Loss 4.2165e+00	(3.31460+00)	ACC@ I	15.00 (

```
7.19) Acc@5 39.00 ( 19.01)
Epoch: [0][1200/2563]
                      Time 1.374 (1.651)
                                             Data 0.731 ( 0.981)
                                                                                                   Acc@1 17.00 (
                                                                    Loss 4.3920e+00 (5.3064e+00)
7.26) Acc@5 32.60 (19.15)
Epoch: [0][1210/2563]
                     Time 1.829 (1.651)
                                              Data 1.190 ( 0.981)
                                                                    Loss 4.2160e+00 (5.2983e+00)
                                                                                                   Acc@1 17.60 (
7.33) Acc@5 37.00 ( 19.28)
                                                                                                   Acc@1 14.20 (
Epoch: [0][1220/2563]
                      Time 1.606 (1.651)
                                             Data 0.966 ( 0.980)
                                                                    Loss 4.3465e+00 (5.2904e+00)
7.39) Acc@5 35.00 ( 19.41)
Epoch: [0][1230/2563]
                      Time 1.479 (1.651)
                                              Data 0.841 ( 0.981)
                                                                    Loss 4.3133e+00 (5.2824e+00)
                                                                                                   Acc@1 13.20 (
7.46) Acc@5 34.20 ( 19.54)
Epoch: [0][1240/2563]
                      Time 2.099 (1.651)
                                              Data 1.464 ( 0.981)
                                                                    Loss 4.3256e+00 (5.2744e+00)
                                                                                                   Acc@1 14.40 (
7.52) Acc@5 32.60 (19.67)
Epoch: [0][1250/2563]
                      Time 1.479 (1.650)
                                              Data 0.845 ( 0.981)
                                                                                                   Acc@1 15.60 (
                                                                    Loss 4.3818e+00 (5.2669e+00)
7.59) Acc@5 35.00 ( 19.80)
Epoch: [0][1260/2563]
                      Time 1.198 ( 1.650)
                                             Data 0.563 ( 0.981)
                                                                    Loss 4.4859e+00 (5.2591e+00)
                                                                                                   Acc@1 14.60 (
7.65) Acc@5 32.20 ( 19.93)
Epoch: [0][1270/2563] Time 1.493 (1.649)
                                             Data 0.859 ( 0.981)
                                                                    Loss 4.1834e+00 (5.2517e+00)
                                                                                                   Acc@1 15.00 (
7.71) Acc@5 37.60 ( 20.05)
Epoch: [0][1280/2563] Time 1.739 (1.649)
                                                                                                   Acc@1 17.00 (
                                              Data 1.103 ( 0.981)
                                                                    Loss 4.2486e+00 (5.2441e+00)
7.78) Acc@5 38.00 ( 20.18)
                      Time 2.431 (1.649)
                                                                                                   Acc@1 13.40 (
Epoch: [0][1290/2563]
                                              Data 1.795 ( 0.981)
                                                                    Loss 4.3873e+00 (5.2367e+00)
7.84) Acc@5 34.20 ( 20.30)
                      Time 2.372 (1.648)
                                              Data 1.715 ( 0.980)
                                                                    Loss 4.2243e+00 (5.2290e+00)
                                                                                                   Acc@1 16.80 (
Epoch: [0][1300/2563]
7.91) Acc@5 36.40 ( 20.43)
Epoch: [0][1310/2563]
                      Time 2.124 ( 1.649)
                                              Data 1.488 ( 0.981)
                                                                    Loss 4.4700e+00 (5.2214e+00)
                                                                                                   Acc@1 11.80 (
7.97) Acc@5 32.60 ( 20.56)
Epoch: [0][1320/2563]
                      Time 1.734 ( 1.648)
                                              Data 1.095 ( 0.980)
                                                                    Loss 4.2420e+00 (5.2141e+00)
                                                                                                   Acc@1 18.00 (
8.04) Acc@5 36.80 ( 20.68)
Epoch: [0][1330/2563]
                      Time 1.776 ( 1.648)
                                              Data 1.135 ( 0.981)
                                                                    Loss 4.2025e+00 (5.2066e+00)
                                                                                                   Acc@1 15.00 (
8.10) Acc@5 40.20 ( 20.81)
Epoch: [0][1340/2563]
                      Time 1.796 ( 1.648)
                                              Data 1.157 ( 0.981)
                                                                    Loss 4.2131e+00 (5.1995e+00)
                                                                                                   Acc@1 18.60 (
8.16) Acc@5 38.00 ( 20.93)
Epoch: [0][1350/2563]
                      Time 2.098 (1.648)
                                              Data 1.460 ( 0.981)
                                                                    Loss 4.1080e+00 (5.1922e+00)
                                                                                                   Acc@1 17.80 (
8.23) Acc@5 40.40 ( 21.05)
Epoch: [0][1360/2563]
                      Time 1.815 ( 1.647)
                                              Data 1.175 ( 0.981)
                                                                    Loss 4.1759e+00 (5.1848e+00)
                                                                                                   Acc@1 16.60 (
8.29) Acc@5 39.00 ( 21.18)
Epoch: [0][1370/2563]
                      Time 2.076 (1.647)
                                              Data 1.434 ( 0.981)
                                                                    Loss 4.1148e+00 (5.1773e+00)
                                                                                                   Acc@1 18.20 (
8.36) Acc@5 36.40 (21.30)
Epoch: [0][1380/2563]
                      Time 2.576 (1.647)
                                              Data 1.888 ( 0.981)
                                                                    Loss 4.0611e+00 (5.1698e+00)
                                                                                                   Acc@1 18.00 (
8.43) Acc@5 39.80 (21.43)
Epoch: [0][1390/2563]
                      Time 1.830 (1.647)
                                             Data 1.184 ( 0.980)
                                                                    Loss 4.1723e+00 (5.1625e+00)
                                                                                                   Acc@1 17.20 (
8.49) Acc@5 41.60 ( 21.56)
Epoch: [0][1400/2563]
                      Time 1.613 (1.647)
                                              Data 0.965 ( 0.981)
                                                                    Loss 4.0025e+00 (5.1550e+00)
                                                                                                   Acc@1 19.20 (
8.56) Acc@5 40.80 (21.69)
                      Time 1.298 ( 1.646)
Epoch: [0][1410/2563]
                                              Data 0.652 ( 0.980)
                                                                                                   Acc@1 19.60 (
                                                                    Loss 4.0490e+00 (5.1481e+00)
8.62) Acc@5 44.20 ( 21.81)
Epoch: [0][1420/2563]
                      Time 1.238 (1.647)
                                              Data 0.588 ( 0.981)
                                                                    Loss 4.1697e+00 (5.1409e+00)
                                                                                                   Acc@1 19.40 (
8.68) Acc@5 37.00 (21.93)
Epoch: [0][1430/2563] Time 1.321 (1.647)
                                             Data 0.672 ( 0.981)
                                                                    Loss 4.0603e+00 (5.1334e+00)
                                                                                                   Acc@1 17.20 (
8.75) Acc@5 39.60 ( 22.06)
Epoch: [0][1440/2563] Time 1.501 (1.646)
                                             Data 0.851 ( 0.980)
                                                                                                   Acc@1 20.00 (
                                                                    Loss 3.9960e+00 (5.1262e+00)
8.82) Acc@5 41.40 ( 22.19)
```

Epoch: [0][1450/2563]	Time	1.423 (1	1.647) Data	0.769	(0.981)	Loss 4	4.1672e+00	(5.1192e+00)	Acc@1	17.80	(
8.89) Acc@5 39.40			2001,, 200		(3332)		1010,100	(33223237)		_,,,,,	`
Epoch: [0][1460/2563]	` ,	0.751 (1	1.647) Data	0.097	(0.981)	Loss	3.9982e+00	(5.1120e+00)	Acc@1	19.20	(
8.95) Acc@5 42.80		(-			(3133-)			(`
Epoch: [0][1470/2563]	,	0.755 (1	1.647) Data	0.100	(0.981)	Loss	3.9263e+00	(5.1050e+00)	Acc@1	20.20	(
9.01) Acc@5 43.40		`	,		,			,			`
Epoch: [0][1480/2563]	,	0.657 (1	1.647) Data	0.002	(0.981)	Loss	3.9839e+00	(5.0985e+00)	Acc@1	18.00	(
9.07) Acc@5 42.80		`	,		,			,			`
Epoch: [0][1490/2563]	Time	0.656 (1	1.647) Data	0.002	(0.981)	Loss	4.1926e+00	(5.0918e+00)	Acc@1	18.60	(
9.14) Acc@5 37.80		•	,		,			,			`
Epoch: [0][1500/2563]	Time	0.662 (1	1.647) Data	0.002	(0.981)	Loss	4.0177e+00	(5.0850e+00)	Acc@1	18.60	(
9.19) Acc@5 42.00	(22.91)										
Epoch: [0][1510/2563]	Time	0.660 (1	1.647) Data	0.003	(0.981)	Loss	4.1322e+00	(5.0784e+00)	Acc@1	17.80	(
9.26) Acc@5 39.60	(23.03)										
Epoch: [0][1520/2563]	Time	0.660 (1	1.647) Data	0.002	(0.980)	Loss	4.1766e+00	(5.0716e+00)	Acc@1	17.00	(
9.32) Acc@5 40.60	(23.15)										
Epoch: [0][1530/2563]		0.660 (1	1.647) Data	0.002	(0.980)	Loss	3.8637e+00	(5.0644e+00)	Acc@1	22.60	(
9.39) Acc@5 44.60	,										
Epoch: [0][1540/2563]		0.667 (1	1.646) Data	0.002	(0.980)	Loss	3.9573e+00	(5.0573e+00)	Acc@1	20.00	(
9.46) Acc@5 43.80	` ,										
Epoch: [0][1550/2563]		1.192 (1	1.647) Data	a 0.529	(0.980)	Loss	4.0068e+00	(5.0502e+00)	Acc@1	19.80	(
9.53) Acc@5 40.60	` ,										
Epoch: [0][1560/2563]		1.388 ()	1.646) Data	a 0.731	(0.980)	Loss	3.7967e+00	(5.0432e+00)	Acc@1	20.80	(
9.60) Acc@5 44.20	,					_	4 0500 .00	/F 00F0 +00\	- 01	10 00	,
Epoch: [0][1570/2563]		1.4// ()	1.646) Data	0.833	(0.980)	Loss	4.0522e+00	(5.0373e+00)	Acc@1	19.00	(
9.65) Acc@5 41.20	,	1 (42 (1	1 (4() Dot	1 005	(0 000)	T 0 7 7	4 14CE-100	(F_020(~100)	701	16 60	,
Epoch: [0][1580/2563] 9.72) Acc@5 39.20		1.043 ()	1.040) Data	1.005	(0.980)	LOSS 4	4.14656+00	(5.0306e+00)	Acc@1	10.00	(
Epoch: [0][1590/2563]	,	1 401 (1	1 646) Data	0 766	(0.980)	Logg	4 02960±00	(5.0239e+00)	Acc@1	10 00	,
9.78) Acc@5 43.60		1.401 ()	1.040) Date	1 0.700	(0.300)	повр.	4.02900100	(3.0239e100)	ACCEI	19.00	(
Epoch: [0][1600/2563]	,	1 796 (1	1 647) Data	1 159	(0.981)	T.Ogg /	4 01756+00	(5.0175e+00)	Acc@1	18 80	(
9.84) Acc@5 41.40		1.750 ()	1.047) Dace	1.137	(0.301)	порр	4.01/50/00	(3:01/30/00)	MCCGI	10.00	(
Epoch: [0][1610/2563]	,	1,332 (1	1.646) Data	0.697	(0.981)	Loss	3.9992e+00	(5.0112e+00)	Acc@1	17.80	(
9.90) Acc@5 43.00			20010)		(3332)			(555112575)		_,,,,,	`
Epoch: [0][1620/2563]	,	1.613 (1	1.647) Data	0.979	(0.981)	Loss	3.8597e+00	(5.0048e+00)	Acc@1	19.00	(
9.97) Acc@5 44.00			,		,			(,			`
Epoch: [0][1630/2563]	` ,	1.992 (1	1.646) Data	1.356	(0.981)	Loss	3.8636e+00	(4.9981e+00)	Acc@1	18.80	(1
0.03) Acc@5 46.40		•	,		,			,			`
Epoch: [0][1640/2563]	Time	2.504 (1	1.646) Data	1.825	(0.981)	Loss	3.9545e+00	(4.9921e+00)	Acc@1	22.80	(1
0.09) Acc@5 41.00	(24.54)										
Epoch: [0][1650/2563]	Time	2.553 (1	1.646) Data	1.886	(0.981)	Loss	4.0675e+00	(4.9861e+00)	Acc@1	19.60	(1
0.15) Acc@5 41.20	(24.65)										
Epoch: [0][1660/2563]	Time	2.648 (1	1.646) Data	1.962	(0.981)	Loss	4.0999e+00	(4.9795e+00)	Acc@1	18.20	(1
0.21) Acc@5 41.80	(24.76)										
Epoch: [0][1670/2563]	Time	2.342 (1	1.645) Data	a 1.706	(0.981)	Loss	3.9395e+00	(4.9733e+00)	Acc@1	18.80	(1
0.28) Acc@5 43.00											
Epoch: [0][1680/2563]		2.652 (1	1.646) Data	1.968	(0.981)	Loss	3.7528e+00	(4.9669e+00)	Acc@1	24.00	(1
0.35) Acc@5 47.20											
Epoch: [0][1690/2563]		2.612 (1	1.646) Data	1.926	(0.981)	Loss	4.0542e+00	(4.9603e+00)	Acc@1	20.40	(1
0.41) Acc@5 41.00						_					
Epoch: [0][1700/2563]	Time	3.358 (1	1.646) Data	a 2.639	(0.981)	Loss	3.8043e+00	(4.9538e+00)	Acc@1	21.80	(1

```
0.48)
       Acc@5 44.20 ( 25.22)
Epoch: [0][1710/2563]
                       Time 2.540 (1.646)
                                              Data 1.853 ( 0.981)
                                                                                                    Acc@1 22.20 ( 1
                                                                     Loss 3.8880e+00 (4.9476e+00)
0.54)
       Acc@5 44.60 ( 25.33)
Epoch: [0][1720/2563]
                       Time 2.518 (1.646)
                                              Data 1.858 ( 0.981)
                                                                     Loss 3.8443e+00 (4.9412e+00)
                                                                                                    Acc@1 21.20 ( 1
       Acc@5 45.20 ( 25.44)
0.61)
                                                                                                    Acc@1 22.60 ( 1
Epoch: [0][1730/2563]
                       Time 2.542 (1.646)
                                              Data 1.866 ( 0.982)
                                                                     Loss 3.7051e+00 (4.9346e+00)
0.67)
       Acc@5 49.20 ( 25.56)
Epoch: [0][1740/2563]
                       Time 2.679 (1.646)
                                              Data 1.989 ( 0.981)
                                                                     Loss 4.1604e+00 (4.9284e+00)
                                                                                                    Acc@1 19.80 ( 1
0.73)
       Acc@5 41.00 ( 25.67)
Epoch: [0][1750/2563]
                       Time 2.570 (1.646)
                                              Data 1.877 ( 0.981)
                                                                     Loss 3.8410e+00 (4.9222e+00)
                                                                                                    Acc@1 20.40 ( 1
0.79)
       Acc@5 43.00 ( 25.78)
Epoch: [0][1760/2563]
                       Time 2.486 (1.646)
                                              Data 1.811 ( 0.981)
                                                                                                    Acc@1 23.80 ( 1
                                                                     Loss 3.6163e+00 (4.9160e+00)
0.85)
       Acc@5 50.00 ( 25.89)
Epoch: [0][1770/2563]
                       Time 2.784 (1.647)
                                              Data 2.093 ( 0.982)
                                                                     Loss 3.6469e+00 (4.9099e+00)
                                                                                                    Acc@1 27.00 ( 1
0.92)
       Acc@5 48.20 ( 26.00)
Epoch: [0][1780/2563]
                       Time 2.722 ( 1.646)
                                              Data 2.018 ( 0.982)
                                                                     Loss 3.6066e+00 (4.9038e+00)
                                                                                                    Acc@1 26.40 ( 1
0.98) Acc@5 50.00 ( 26.11)
                       Time 2.531 (1.646)
                                              Data 1.832 ( 0.981)
Epoch: [0][1790/2563]
                                                                     Loss 3.8522e+00 (4.8976e+00)
                                                                                                    Acc@1 24.00 ( 1
1.05)
       Acc@5 45.60 ( 26.22)
                       Time 2.422 ( 1.646)
                                              Data 1.773 ( 0.981)
Epoch: [0][1800/2563]
                                                                     Loss 3.9128e+00 (4.8915e+00)
                                                                                                    Acc@1 18.40 ( 1
1.11)
      Acc@5 43.80 ( 26.33)
                       Time 2.624 (1.646)
                                              Data 1.921 ( 0.981)
                                                                     Loss 3.8695e+00 (4.8851e+00)
                                                                                                    Acc@1 20.80 ( 1
Epoch: [0][1810/2563]
1.17)
       Acc@5 43.20 ( 26.45)
Epoch: [0][1820/2563]
                       Time 2.436 (1.646)
                                              Data 1.783 ( 0.981)
                                                                     Loss 3.8543e+00 (4.8789e+00)
                                                                                                    Acc@1 21.20 ( 1
1.24)
      Acc@5 45.20 ( 26.56)
Epoch: [0][1830/2563]
                       Time 2.572 ( 1.646)
                                              Data 1.857 ( 0.981)
                                                                     Loss 3.8314e+00 (4.8729e+00)
                                                                                                    Acc@1 20.80 ( 1
1.31)
       Acc@5 45.60 ( 26.67)
Epoch: [0][1840/2563]
                       Time 2.697 (1.646)
                                              Data 1.982 ( 0.981)
                                                                     Loss 3.8130e+00 (4.8671e+00)
                                                                                                    Acc@1 24.00 ( 1
1.36) Acc@5 46.40 ( 26.77)
Epoch: [0][1850/2563]
                       Time 2.474 ( 1.645)
                                              Data 1.822 ( 0.980)
                                                                     Loss 3.8999e+00 (4.8613e+00)
                                                                                                    Acc@1 20.20 ( 1
1.42) Acc@5 44.60 ( 26.88)
Epoch: [0][1860/2563]
                       Time 2.605 ( 1.645)
                                              Data 1.899 ( 0.980)
                                                                     Loss 3.6072e+00 (4.8551e+00)
                                                                                                    Acc@1 22.40 ( 1
1.49) Acc@5 49.80 ( 26.99)
Epoch: [0][1870/2563]
                       Time 2.374 (1.645)
                                              Data 1.712 ( 0.980)
                                                                     Loss 3.6016e+00 (4.8490e+00)
                                                                                                    Acc@1 27.80 ( 1
1.55) Acc@5 49.00 ( 27.10)
Epoch: [0][1880/2563]
                       Time 2.554 (1.645)
                                              Data 1.842 ( 0.980)
                                                                     Loss 3.6917e+00 (4.8430e+00)
                                                                                                    Acc@1 23.00 ( 1
1.61) Acc@5 46.20 ( 27.21)
Epoch: [0][1890/2563]
                       Time 2.399 (1.645)
                                              Data 1.740 ( 0.979)
                                                                     Loss 3.6933e+00 (4.8371e+00)
                                                                                                    Acc@1 21.20 ( 1
       Acc@5 46.20 ( 27.31)
1.67)
Epoch: [0][1900/2563]
                       Time 2.554 (1.644)
                                              Data 1.845 ( 0.979)
                                                                     Loss 3.5803e+00 (4.8311e+00)
                                                                                                    Acc@1 25.60 ( 1
1.73)
       Acc@5 50.60 ( 27.42)
Epoch: [0][1910/2563]
                       Time 2.884 (1.645)
                                              Data 2.157 ( 0.979)
                                                                     Loss 3.7199e+00 (4.8250e+00)
                                                                                                    Acc@1 25.40 ( 1
1.80)
       Acc@5 48.20 ( 27.53)
Epoch: [0][1920/2563]
                       Time 2.642 (1.644)
                                              Data 1.925 ( 0.979)
                                                                     Loss 3.6995e+00 (4.8195e+00)
                                                                                                    Acc@1 23.80 ( 1
1.85)
       Acc@5 47.60 ( 27.62)
Epoch: [0][1930/2563]
                       Time 2.736 (1.644)
                                              Data 2.026 ( 0.979)
                                                                     Loss 3.5391e+00 (4.8136e+00)
                                                                                                    Acc@1 29.00 ( 1
1.91)
       Acc@5 52.20 ( 27.73)
Epoch: [0][1940/2563]
                       Time 2.577 (1.644)
                                              Data 1.857 ( 0.978)
                                                                     Loss 3.6781e+00 (4.8077e+00)
                                                                                                    Acc@1 23.40 ( 1
1.98)
       Acc@5 46.40 ( 27.83)
Epoch: [0][1950/2563] Time 2.782 (1.644)
                                              Data 2.071 ( 0.978)
                                                                     Loss 3.7359e+00 (4.8019e+00)
                                                                                                    Acc@1 22.20 ( 1
2.04)
       Acc@5 47.20 ( 27.94)
```

Epoch: [0][1960/2563]	Time 2.478 (1.644)	Data	1.799 (0.978)	Loss 3.6846e+00	(4.7963e+00)	Acc@1	22.20 (1
2.09) Acc@5 46.60 (,			1 060 (0 050)	- 2 0151 .00		- 01	00 40 4 1
Epoch: [0][1970/2563]	Time 2.573 (1.644)	Data	1.868 (0.978)	Loss 3.8171e+00	(4./909e+00)	ACC@1	23.40 (1
2.15) Acc@5 47.40 (,	1 (45)	Doto	2 144 (0 070)	Togg 2 7/21a+00	(4 70540100)	701	22 00 / 1
Epoch: [0][1980/2563] 2.20) Acc@5 47.60 (Time 2.859 (1.045)	рата	2.144 (0.979)	Loss 3.7431e+00	(4./854e+00)	ACCUI	22.80 (1
2.20) Acc@5 47.60 (Epoch: [0][1990/2563]	Time 2.476 (1 644)	Data	1.796 (0.978)	Loss 3.6308e+00	(4 77060+00)	70001	21.60 (1
2.27) Acc@5 49.20 (1.044)	Data	1.790 (0.970)	TO22 2.02006±00	(4.77900+00)	ACCEI	21.00 (1
Epoch: [0][2000/2563]	•	1 644)	Da+a	1.987 (0.978)	Loss 3.6888e+00	(4 77400+00)	Acce 1	23.40 (1
2.33) Acc@5 47.60 (1.044)	Data	1.907 (0.970)	LOSS 3.00000E100	(4.77400100)	ACCEI	23.40 (1
Epoch: [0][2010/2563]	,	1.645)	Data	1.824 (0.978)	Loss 3.7095e+00	(4.7682e+00)	Acc@1	21.80 (1
2.38) Acc@5 47.80 (1.013)	Ducu	1.021 (0.570)	1000 3.7035C.00	(1.70020.00)	110001	21.00 (1
Epoch: [0][2020/2563]	•	1.644)	Data	1.789 (0.978)	Loss 3.5944e+00	(4.7622e+00)	Acc@1	26.20 (1
2.45) Acc@5 50.20 (2000	11,05 (015,0)		(1170220700)		
Epoch: [0][2030/2563]	,	1.645)	Data	1.728 (0.978)	Loss 3.6925e+00	(4.7568e+00)	Acc@1	22.40 (1
2.51) Acc@5 46.60 (,		,		,		`
Epoch: [0][2040/2563]	Time 2.726 (1.645)	Data	2.006 (0.978)	Loss 3.6648e+00	(4.7513e+00)	Acc@1	24.00 (1
2.57) Acc@5 46.00 (28.84)							
Epoch: [0][2050/2563]	Time 2.760 (1.644)	Data	2.055 (0.978)	Loss 3.5461e+00	(4.7458e+00)	Acc@1	25.60 (1
2.63) Acc@5 51.00 (28.94)							
Epoch: [0][2060/2563]	Time 2.679 (1.645)	Data	1.946 (0.978)	Loss 3.6648e+00	(4.7402e+00)	Acc@1	23.80 (1
2.68) Acc@5 49.60 (,							
Epoch: [0][2070/2563]		1.645)	Data	1.843 (0.978)	Loss 3.3907e+00	(4.7346e+00)	Acc@1	26.20 (1
2.74) Acc@5 55.00 (,							
Epoch: [0][2080/2563]		1.645)	Data	1.805 (0.978)	Loss 3.6459e+00	(4.7289e+00)	Acc@1	27.00 (1
2.81) Acc@5 48.20 (•	1 645)		1 504 (0 050)	- 2 4615 .00		- 01	00 00 / 1
Epoch: [0][2090/2563]		1.645)	Data	1.704 (0.978)	Loss 3.4615e+00	(4./232e+00)	ACC@1	29.80 (1
2.87) Acc@5 55.60 (•	1 (45)	Doto	1 017 (0 070)	Togg 2 751(a+00	(4 7170 - 100)	701	22 60 / 1
Epoch: [0][2100/2563] 2.93) Acc@5 45.20 (1.045)	Data	1.917 (0.978)	Loss 3.7516e+00	(4./1/60+00)	ACCUI	22.60 (1
Epoch: [0][2110/2563]	,	1 645)	Da+a	1.860 (0.977)	Loss 3.3891e+00	(4 71230+00)	Acce 1	29.00 (1
2.99) Acc@5 52.60 (1.043)	Data	1.000 (0.377)	1055 3:30710:00	(4.71230100)	nccei	23.00 (1
Epoch: [0][2120/2563]	•	1.645)	Data	1.906 (0.977)	Loss 3.7213e+00	(4.7070e+00)	Acc@1	21.80 (1
3.05) Acc@5 48.20 (2000	1000 (000,,,)		(1170700700)		
Epoch: [0][2130/2563]	•	1.644)	Data	1.695 (0.977)	Loss 3.6740e+00	(4.7016e+00)	Acc@1	23.80 (1
3.11) Acc@5 46.40 (,		,		,		`
Epoch: [0][2140/2563]	Time 2.737 (1.644)	Data	2.031 (0.977)	Loss 3.4626e+00	(4.6963e+00)	Acc@1	28.40 (1
3.17) Acc@5 52.20 (29.83)							
Epoch: [0][2150/2563]	Time 2.547 (1.644)	Data	1.834 (0.976)	Loss 3.4911e+00	(4.6913e+00)	Acc@1	27.60 (1
3.23) Acc@5 50.80 (29.92)							
Epoch: [0][2160/2563]	Time 2.630 (1.644)	Data	1.899 (0.976)	Loss 3.7201e+00	(4.6860e+00)	Acc@1	24.00 (1
3.29) Acc@5 48.00 (30.01)							
Epoch: [0][2170/2563]	Time 3.237 (1.644)	Data	2.526 (0.976)	Loss 3.4880e+00	(4.6808e+00)	Acc@1	28.60 (1
3.35) Acc@5 52.60 (,							
Epoch: [0][2180/2563]	Time 2.645 (1.644)	Data	1.940 (0.976)	Loss 3.5610e+00	(4.6755e+00)	Acc@1	26.40 (1
3.41) Acc@5 50.00 (,	1 (44)	5.1	0 457 (0 076)	T	44 6700 : : 223	3 0 1	00 40 4 4
Epoch: [0][2190/2563]	Time 3.171 (1.644)	Data	2.457 (0.976)	Loss 3.4522e+00	(4.6/UZE+UU)	ACC@1	29.40 (1
3.47) Acc@5 53.40 (,	1 644	Da+-	1 701 / 0 07()	Togg 2 E716-100	(4 66520100)	70001	27 40 / 1
Epoch: [0][2200/2563]	Time 2.461 (1.044)	υατα	1.791 (0.976)	Loss 3.5716e+00	(4.0032e+00)	ACCUI	27.40 (1
3.53) Acc@5 50.40 (Epoch: [0][2210/2563]	•	1 644)	Da+a	1 866 (0 976)	Togg 3 50650±00	(4 65996±00)	Acca 1	27.20 (1
Epoch: [0][2210/2503]	Time 2.585 (1.044)	Dald	1.866 (0.976)	Loss 3.5965e+00	(4.00333ET00)	ACCEL	2/•2U (1

3.58) Ac	c@5 50.20 (30.50)											_
•	[2220/2563]		2.498 (1.644)	Data	1.783 (0.976)	Loss	3.5203e+00	(4.6545e+00)	Acc@1	28.00 (1	
	c@5 50.80 (`	,		`	,			,		`	
,	[2230/2563]	,	2.471 (1.644)	Data	1.793 (0.975)	Loss	3.7108e+00	(4.6495e+00)	Acc@1	22.60 (1	
3.70) Ac	c@5 47.00 (30.69)	·	•			•					•	
Epoch: [0]	[2240/2563]	Time	2.677 (1.643)	Data	1.973 (0.975)	Loss	3.4724e+00	(4.6443e+00)	Acc@1	28.20 (1	
3.76) Ac	c@5 52.80 (30.79)											
Epoch: [0]	[2250/2563]	Time	2.575 (1.644)	Data	1.882 (0.975)	Loss	3.4736e+00	(4.6392e+00)	Acc@1	25.00 (1	
3.82) Ac	c@5 52.80 (30.88)											
Epoch: [0]	[2260/2563]	Time	2.793 (1.644)	Data	2.081 (0.975)	Loss	3.3521e+00	(4.6340e+00)	Acc@1	28.40 (1	
3.88) Ac	c@5 51.20 (30.97)											
	[2270/2563]		2.364 (1.644)	Data	1.700 (0.975)	Loss	3.4548e+00	(4.6289e+00)	Acc@1	24.60 (1	
•	c@5 51.60 (
	[2280/2563]		2.587 (1.643)	Data	1.867 (0.975)	Loss	3.5622e+00	(4.6239e+00)	Acc@1	26.00 (1	
	c@5 49.40 (
	[2290/2563]		2.637 (1.644)	Data	1.929 (0.975)	Loss	3.4644e+00	(4.6190e+00)	Acc@1	26.60 (1	
,	c@5 51.00 (,						_			- 04		
	[2300/2563]		2.450 (1.643)	Data	1.742 (0.975)	Loss	3.3746e+00	(4.6138e+00)	Acc@1	30.60 (1	
,	c@5 54.00 (,	2 400 (1 (42)	D-1-	1 746 /	0.075)	T	2 2210-100	(4 (004-100)	7 01	20 00 / 1	
	[2310/2563]		2.408 (1.643)	рата	1./46 (0.975)	LOSS	3.3218e+00	(4.6084e+00)	ACC@1	30.80 (1	
,	c@5 54.80 ([2320/2563]	,	2.468 (1 6/2)	Data	1 752 /	0.974)	Togg	2 51000±00	(4.6033e+00)	7.00.01	25.80 (1	
	c@5 51.40 (2.400 (1.043)	Data	1.752 (0.974)	LUSS	3.31900-00	(4.00330+00)	ACCEI	23.60 (1	
	[2330/2563]		3.423 (1 643)	Data	2 708 (0.974)	T.Ogg	3 38150+00	(4.5984e+00)	Acc@1	27.00 (1	
	c@5 53.40 (3.423 (1.043)	Data	2.700 (0.5/4)	позз	3.30130100	(4.37040100)	ACCEI	27.00 (1	
	[2340/2563]		2.743 (1.643)	Data	2.038 (0.974)	Loss	3.3728e+00	(4.5934e+00)	Acc@1	28.40 (1	
	c@5 55.80 (,			(
•	[2350/2563]		2.689 (1.643)	Data	1.981 (0.974)	Loss	3.4277e+00	(4.5887e+00)	Acc@1	25.60 (1	
	c@5 51.40 (•	•		`	,			,		•	
Epoch: [0]	[2360/2563]	Time	2.548 (1.643)	Data	1.841 (0.974)	Loss	3.3551e+00	(4.5837e+00)	Acc@1	28.00 (1	
4.44) Ac	c@5 55.40 (31.89)											
Epoch: [0]	[2370/2563]	Time	2.773 (1.643)	Data	2.068 (0.974)	Loss	3.5415e+00	(4.5789e+00)	Acc@1	28.80 (1	
4.50) Ac	c@5 51.40 (
	[2380/2563]		2.482 (1.643)	Data	1.806 (0.974)	Loss	3.4782e+00	(4.5739e+00)	Acc@1	28.40 (1	
,	c@5 53.20 (,											
	[2390/2563]		2.339 (1.643)	Data	1.676 (0.974)	Loss	3.4960e+00	(4.5690e+00)	Acc@1	26.60 (1	
,	c@5 52.00 (,											
	[2400/2563]		2.688 (1.643)	Data	1.952 (0.974)	Loss	3.5244e+00	(4.5639e+00)	Acc@1	23.20 (1	
,	c@5 51.80 (,						_			- 04		
	[2410/2563]		2.658 (1.643)	Data	1.927 (0.974)	Loss	3.2986e+00	(4.5590e+00)	Acc@1	29.00 (1	
•	c@5 54.60 (-	2 (45 (1 (42)	D-1-	1 016 /	0.074)	T	2 2650-100	(4	7 0 1	20 20 / 1	
	[2420/2563]		2.645 (1.643)	рата	1.916 (0.974)	LOSS	3.3658e+00	(4.5540e+00)	ACC@1	28.20 (1	
•	c@5 54.80 (2 502 /	1 6/2)	Data	1 07/ /	0.974)	Togg	2 21040±00	(4.5493e+00)	70001	30.00 (1	
	[2430/2563] c@5 54.80 (2.593 (1.043)	раса	1.0/4 (0.974)	LOSS	3.31946+00	(4.5493e+00)	ACCUI	30.00 (1	
•	[2440/2563]	-	2.836 (1 643)	Data	2 107 (0.974)	T.Ogg	3 35470+00	(4.5446e+00)	Acc@1	30.40 (1	
	c@5 57.00 (2.030 (1.043)	Data	2.107 (0.5/4)	позз	3.33476100	(4.54400100)	ACCEI	30.40 (1	
•	[2450/2563]	-	2.456 (1.644)	Data	1.785	0.974)	Loss	3.2607e+00	(4.5401e+00)	Acc@1	29.80 (1	
	c@5 57.00 ((,			,		1111111	(
•	[2460/2563]	-	2.683 (1.643)	Data	1.946 (0.974)	Loss	3.4323e+00	(4.5352e+00)	Acc@1	26.60 (1	
	c@5 53.00 ((,		- \	,			,	-	. , _	
•	,	,											_

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Epoch: [0][2470/2563] Time 2.316 (1.643)
                                              Data 1.648 ( 0.973)
                                                                    Loss 3.3597e+00 (4.5307e+00)
                                                                                                   Acc@1 25.80 ( 1
5.05) Acc@5 55.80 ( 32.86)
                      Time 2.860 ( 1.643)
Epoch: [0][2480/2563]
                                              Data 2.139 ( 0.973)
                                                                    Loss 3.4392e+00 (4.5261e+00)
                                                                                                   Acc@1 26.60 ( 1
5.10)
      Acc@5 50.20 ( 32.94)
Epoch: [0][2490/2563]
                      Time 2.551 (1.643)
                                              Data 1.856 ( 0.973)
                                                                     Loss 3.6889e+00 (4.5216e+00)
                                                                                                   Acc@1 27.20 ( 1
      Acc@5 48.40 ( 33.02)
5.16)
Epoch: [0][2500/2563]
                      Time 2.645 ( 1.643)
                                              Data 1.918 ( 0.973)
                                                                    Loss 3.1878e+00 (4.5168e+00)
                                                                                                   Acc@1 31.80 ( 1
5.22)
      Acc@5 56.60 ( 33.11)
Epoch: [0][2510/2563]
                      Time 2.464 (1.643)
                                              Data 1.754 ( 0.973)
                                                                     Loss 3.2117e+00 (4.5121e+00)
                                                                                                   Acc@1 31.00 ( 1
5.27) Acc@5 54.60 ( 33.20)
Epoch: [0][2520/2563]
                      Time 3.013 (1.643)
                                              Data 2.288 ( 0.973)
                                                                    Loss 3.1778e+00 (4.5073e+00)
                                                                                                   Acc@1 29.20 ( 1
5.33) Acc@5 56.60 ( 33.28)
Epoch: [0][2530/2563] Time 2.881 (1.643)
                                              Data 2.165 ( 0.973)
                                                                    Loss 3.4337e+00 (4.5025e+00)
                                                                                                   Acc@1 27.60 ( 1
5.39) Acc@5 52.80 ( 33.38)
Epoch: [0][2540/2563] Time 2.434 (1.643)
                                              Data 1.773 ( 0.973)
                                                                    Loss 3.1844e+00 (4.4976e+00)
                                                                                                   Acc@1 33.80 ( 1
5.44) Acc@5 55.40 ( 33.46)
Epoch: [0][2550/2563] Time 2.582 (1.643)
                                             Data 1.880 ( 0.973)
                                                                    Loss 3.2859e+00 (4.4931e+00)
                                                                                                   Acc@1 30.40 ( 1
5.50) Acc@5 54.60 ( 33.54)
Epoch: [0][2560/2563] Time 2.478 (1.643)
                                              Data 1.799 ( 0.973)
                                                                    Loss 3.2529e+00 (4.4882e+00)
                                                                                                   Acc@1 32.20 ( 1
5.56) Acc@5 56.00 ( 33.63)
Test: [ 0/100] Time 6.483 ( 6.483)
                                      Loss 3.9590e+00 (3.9590e+00)
                                                                     Acc@1 29.00 ( 29.00)
                                                                                            Acc@5 48.40 ( 48.40)
Test: [ 10/100] Time 2.963 ( 1.976)
                                      Loss 3.9870e+00 (4.0170e+00)
                                                                     Acc@1 21.00 ( 23.16)
                                                                                            Acc@5 44.40 ( 44.69)
Test: [ 20/100] Time 2.865 ( 1.842)
                                                                     Acc@1 10.00 ( 21.34)
                                                                                            Acc@5 33.80 ( 44.14)
                                      Loss 4.3763e+00 (3.9825e+00)
Test: [ 30/100] Time 2.885 ( 1.790)
                                      Loss 3.3320e+00 (3.8490e+00)
                                                                     Acc@1 24.80 ( 21.31)
                                                                                            Acc@5 54.60 ( 45.63)
Test: [ 40/100] Time 2.547 ( 1.772)
                                                                     Acc@1 33.00 ( 21.81)
                                      Loss 3.2501e+00 (3.8563e+00)
                                                                                            Acc@5 59.20 ( 45.50)
Test: [ 50/100] Time 2.774 ( 1.756)
                                      Loss 5.0104e+00 (3.9624e+00)
                                                                     Acc@1 10.80 ( 20.70)
                                                                                            Acc@5 25.20 ( 43.51)
Test: [ 60/100] Time 2.779 ( 1.748)
                                      Loss 4.0820e+00 (3.9786e+00)
                                                                     Acc@1 19.40 ( 20.48)
                                                                                            Acc@5 40.80 ( 43.01)
Test: [ 70/100] Time 2.950 ( 1.734)
                                      Loss 4.8737e+00 (4.0098e+00)
                                                                     Acc@1 9.40 ( 20.12)
                                                                                            Acc@5 27.00 ( 42.45)
Test: [ 80/100] Time 2.940 ( 1.727)
                                                                     Acc@1 23.20 ( 20.01)
                                      Loss 4.0539e+00 (4.0500e+00)
                                                                                            Acc@5 41.80 ( 41.83)
Test: [ 90/100] Time 2.892 ( 1.720)
                                      Loss 4.2836e+00 (4.0748e+00)
                                                                     Acc@1 20.20 ( 19.67)
                                                                                            Acc@5 40.40 ( 41.40)
* Acc@1 19.706 Acc@5 41.196
lr: 0.05
Epoch: [1][ 0/2563]
                      Time 4.411 ( 4.411)
                                             Data 3.684 ( 3.684)
                                                                    Loss 3.2238e+00 (3.2238e+00)
                                                                                                   Acc@1 29.80 ( 2
9.80) Acc@5 56.80 ( 56.80)
Epoch: [1][ 10/2563]
                     Time 2.504 ( 1.825)
                                              Data 1.804 (1.149)
                                                                    Loss 3.1083e+00 (3.1708e+00)
                                                                                                   Acc@1 35.60 ( 3
2.91) Acc@5 58.40 ( 57.67)
Epoch: [1][ 20/2563]
                      Time 2.560 (1.721)
                                              Data 1.850 ( 1.046)
                                                                    Loss 3.0561e+00 (3.1642e+00)
                                                                                                   Acc@1 33.20 ( 3
2.79) Acc@5 58.40 ( 57.75)
Epoch: [1][ 30/2563]
                      Time 2.363 (1.699)
                                              Data 1.705 ( 1.022)
                                                                     Loss 3.0806e+00 (3.1456e+00)
                                                                                                   Acc@1 37.00 ( 3
2.87) Acc@5 58.80 ( 57.98)
Epoch: [1][ 40/2563]
                      Time 2.563 (1.676)
                                              Data 1.877 ( 0.998)
                                                                    Loss 3.0295e+00 (3.1304e+00)
                                                                                                   Acc@1 34.40 ( 3
3.28)
      Acc@5 60.00 ( 58.42)
Epoch: [1][ 50/2563]
                      Time 2.489 (1.657)
                                              Data 1.776 ( 0.980)
                                                                     Loss 3.0413e+00 (3.1287e+00)
                                                                                                   Acc@1 35.20 ( 3
3.35)
      Acc@5 59.80 ( 58.49)
Epoch: [1][ 60/2563]
                      Time 2.454 (1.639)
                                              Data 1.737 ( 0.963)
                                                                    Loss 3.2110e+00 (3.1116e+00)
                                                                                                   Acc@1 30.20 ( 3
3.50)
     Acc@5 57.00 ( 58.84)
Epoch: [1][ 70/2563]
                      Time 2.299 (1.624)
                                              Data 1.637 ( 0.948)
                                                                    Loss 2.7541e+00 (3.1015e+00)
                                                                                                   Acc@1 37.80 ( 3
3.48) Acc@5 64.80 (59.01)
Epoch: [1][ 80/2563]
                      Time 2.354 (1.616)
                                              Data 1.692 ( 0.941)
                                                                    Loss 2.8702e+00 (3.0957e+00)
                                                                                                   Acc@1 34.60 ( 3
3.47) Acc@5 62.40 (59.12)
                      Time 2.109 ( 1.608)
Epoch: [1][ 90/2563]
                                              Data 1.443 ( 0.934)
                                                                    Loss 3.0488e+00 (3.0876e+00)
                                                                                                   Acc@1 32.80 ( 3
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3.47) Acc@5 59.40 ( 59.36)
Epoch: [1][ 100/2563]
                       Time 2.249 (1.606)
                                              Data 1.582 ( 0.933)
                                                                                                    Acc@1 37.80 ( 3
                                                                     Loss 2.9540e+00 (3.0817e+00)
3.54)
       Acc@5 63.40 ( 59.45)
Epoch: [1][ 110/2563]
                       Time 2.243 (1.604)
                                              Data 1.581 ( 0.932)
                                                                     Loss 3.0034e+00 (3.0787e+00)
                                                                                                    Acc@1 37.00 ( 3
3.58)
       Acc@5 62.80 ( 59.58)
Epoch: [1][ 120/2563]
                       Time 2.462 (1.605)
                                              Data 1.748 ( 0.933)
                                                                     Loss 3.0216e+00 (3.0733e+00)
                                                                                                    Acc@1 36.80 ( 3
3.71)
       Acc@5 61.00 ( 59.68)
Epoch: [1][ 130/2563]
                       Time 2.431 (1.604)
                                              Data 1.766 ( 0.932)
                                                                     Loss 2.9985e+00 (3.0691e+00)
                                                                                                    Acc@1 34.60 ( 3
3.84)
       Acc@5 61.60 ( 59.82)
Epoch: [1][ 140/2563]
                       Time 2.355 (1.603)
                                              Data 1.688 ( 0.930)
                                                                     Loss 2.8790e+00 (3.0637e+00)
                                                                                                    Acc@1 33.60 ( 3
3.89)
       Acc@5 65.40 ( 59.91)
Epoch: [1][ 150/2563]
                       Time 2.254 (1.599)
                                              Data 1.588 ( 0.927)
                                                                     Loss 2.9907e+00 (3.0602e+00)
                                                                                                    Acc@1 35.00 ( 3
3.89)
       Acc@5 60.20 ( 60.00)
Epoch: [1][ 160/2563]
                       Time 2.522 (1.602)
                                              Data 1.806 ( 0.928)
                                                                     Loss 3.0451e+00 (3.0572e+00)
                                                                                                    Acc@1 32.20 ( 3
3.93)
       Acc@5 61.60 ( 60.04)
Epoch: [1][ 170/2563]
                       Time 2.609 (1.601)
                                              Data 1.872 ( 0.927)
                                                                     Loss 3.0246e+00 (3.0547e+00)
                                                                                                    Acc@1 32.00 ( 3
3.91) Acc@5 61.60 ( 60.09)
                       Time 2.358 (1.599)
                                              Data 1.695 ( 0.925)
                                                                     Loss 3.0053e+00 (3.0514e+00)
                                                                                                    Acc@1 35.60 ( 3
Epoch: [1][ 180/2563]
3.97)
       Acc@5 59.80 ( 60.15)
Epoch: [1][ 190/2563]
                                              Data 1.707 ( 0.926)
                       Time 2.367 (1.599)
                                                                     Loss 3.0161e+00 (3.0503e+00)
                                                                                                    Acc@1 37.00 ( 3
3.97)
       Acc@5 60.60 ( 60.16)
                       Time 2.388 (1.602)
                                              Data 1.722 ( 0.927)
                                                                     Loss 3.0346e+00 (3.0477e+00)
                                                                                                    Acc@1 35.20 ( 3
Epoch: [1][ 200/2563]
4.04)
       Acc@5 59.80 ( 60.18)
                                                                     Loss 3.0804e+00 (3.0430e+00)
Epoch: [1][ 210/2563]
                       Time 2.569 (1.603)
                                              Data 1.855 ( 0.929)
                                                                                                    Acc@1 32.60 ( 3
4.09)
      Acc@5 59.60 ( 60.26)
                                                                     Loss 2.8891e+00 (3.0401e+00)
Epoch: [1][ 220/2563]
                       Time 2.481 (1.602)
                                              Data 1.817 ( 0.927)
                                                                                                    Acc@1 37.60 ( 3
4.15)
       Acc@5 59.40 ( 60.31)
Epoch: [1][ 230/2563]
                       Time 2.414 ( 1.601)
                                              Data 1.748 ( 0.926)
                                                                     Loss 2.8712e+00 (3.0366e+00)
                                                                                                    Acc@1 36.20 ( 3
      Acc@5 61.40 ( 60.34)
4.22)
Epoch: [1][ 240/2563]
                       Time 2.123 ( 1.599)
                                              Data 1.458 ( 0.925)
                                                                     Loss 2.9694e+00 (3.0339e+00)
                                                                                                    Acc@1 35.20 ( 3
4.21) Acc@5 61.20 ( 60.39)
Epoch: [1][ 250/2563]
                       Time 1.832 (1.598)
                                              Data 1.165 ( 0.925)
                                                                     Loss 3.0296e+00 (3.0302e+00)
                                                                                                    Acc@1 35.40 ( 3
4.26) Acc@5 59.80 ( 60.45)
Epoch: [1][ 260/2563]
                       Time 1.495 (1.599)
                                              Data 0.828 ( 0.926)
                                                                     Loss 2.9637e+00 (3.0289e+00)
                                                                                                    Acc@1 35.40 ( 3
4.29) Acc@5 61.40 ( 60.46)
Epoch: [1][ 270/2563]
                       Time 1.437 (1.599)
                                              Data 0.771 ( 0.926)
                                                                     Loss 3.0936e+00 (3.0273e+00)
                                                                                                    Acc@1 33.40 ( 3
      Acc@5 62.00 ( 60.48)
4.31)
Epoch: [1][ 280/2563]
                       Time 1.237 (1.599)
                                              Data 0.569 ( 0.927)
                                                                     Loss 2.8856e+00 (3.0249e+00)
                                                                                                    Acc@1 35.60 ( 3
       Acc@5 63.20 ( 60.51)
4.35)
Epoch: [1][ 290/2563]
                       Time 1.630 (1.601)
                                              Data 0.964 ( 0.928)
                                                                     Loss 2.8864e+00 (3.0235e+00)
                                                                                                    Acc@1 37.60 ( 3
4.39)
       Acc@5 63.20 ( 60.56)
Epoch: [1][ 300/2563]
                       Time 2.266 (1.603)
                                              Data 1.604 ( 0.930)
                                                                     Loss 2.9050e+00 (3.0226e+00)
                                                                                                    Acc@1 36.80 ( 3
4.39)
       Acc@5 62.00 ( 60.59)
Epoch: [1][ 310/2563]
                       Time 1.859 ( 1.601)
                                              Data 1.196 ( 0.929)
                                                                     Loss 2.8989e+00 (3.0204e+00)
                                                                                                    Acc@1 36.20 ( 3
4.43)
       Acc@5 62.60 ( 60.62)
Epoch: [1][ 320/2563]
                       Time 1.390 (1.601)
                                              Data 0.723 ( 0.929)
                                                                     Loss 2.8465e+00 (3.0186e+00)
                                                                                                    Acc@1 38.60 ( 3
4.47)
       Acc@5 63.60 ( 60.62)
Epoch: [1][ 330/2563]
                       Time 1.630 ( 1.601)
                                              Data 0.964 ( 0.929)
                                                                     Loss 2.9477e+00 (3.0169e+00)
                                                                                                    Acc@1 36.40 ( 3
4.46)
       Acc@5 61.80 ( 60.64)
Epoch: [1][ 340/2563]
                       Time 1.509 (1.601)
                                              Data 0.840 ( 0.929)
                                                                     Loss 3.0185e+00 (3.0171e+00)
                                                                                                    Acc@1 33.60 ( 3
4.45)
       Acc@5 60.40 ( 60.66)
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4.50) Acc@5 64.40 (60.71)		
Epoch: [1][360/2563] Time 1.102 (1.599) Data 0.436 (0.928) Loss 3.0827e+00 (3.0131e+00) 4.52) Acc@5 60.40 (60.74)	Acc@1 34.20 (3	
Epoch: [1][370/2563] Time 1.050 (1.599) Data 0.385 (0.927) Loss 2.9970e+00 (3.0101e+00)	Acc@1 36.20 (3	
4.56) Acc@5 61.20 (60.78)	ACCE1 30.20 (3	
Epoch: [1][380/2563] Time 0.765 (1.598) Data 0.098 (0.927) Loss 2.9840e+00 (3.0090e+00)	Acc@1 34.00 (3	
4.57) Acc@5 61.20 (60.81)	MCCe1 34.00 (3	
Epoch: [1][390/2563] Time 0.759 (1.598) Data 0.098 (0.927) Loss 2.6969e+00 (3.0053e+00)	Acc@1 40.60 (3	
4.64) Acc@5 64.80 (60.87)	100001 40.00 (3	
Epoch: [1][400/2563] Time 0.765 (1.599) Data 0.097 (0.927) Loss 3.0451e+00 (3.0041e+00)	Acc@1 35.00 (3	
4.65) Acc@5 59.60 (60.91)	1100(1 33:00 (3	
Epoch: [1][410/2563] Time 0.769 (1.599) Data 0.104 (0.927) Loss 2.9582e+00 (3.0026e+00)	Acc@1 37.00 (3	
4.67) Acc@5 60.40 (60.93)	110001 37:00 (3	
Epoch: [1][420/2563] Time 0.966 (1.598) Data 0.301 (0.927) Loss 2.9010e+00 (2.9997e+00)	Acc@1 39.60 (3	
4.70) Acc@5 64.40 (60.99)	110001	
Epoch: [1][430/2563] Time 0.833 (1.599) Data 0.166 (0.927) Loss 3.0048e+00 (2.9982e+00)	Acc@1 34.60 (3	
4.72) Acc@5 60.00 (61.02)		
Epoch: [1][440/2563] Time 1.054 (1.599) Data 0.388 (0.928) Loss 2.8382e+00 (2.9959e+00)	Acc@1 35.00 (3	
4.75) Acc@5 63.40 (61.06)	,	
Epoch: [1][450/2563] Time 1.004 (1.599) Data 0.339 (0.928) Loss 2.7777e+00 (2.9951e+00)	Acc@1 41.20 (3	
4.78) Acc@5 65.60 (61.07)	·	
Epoch: [1][460/2563] Time 0.919 (1.600) Data 0.254 (0.928) Loss 2.9852e+00 (2.9942e+00)	Acc@1 37.20 (3	
4.80) Acc@5 61.00 (61.08)		
Epoch: [1][470/2563] Time 0.987 (1.600) Data 0.320 (0.929) Loss 2.9588e+00 (2.9929e+00)	Acc@1 33.60 (3	
4.81) Acc@5 62.00 (61.11)		
Epoch: [1][480/2563] Time 0.880 (1.600) Data 0.213 (0.929) Loss 2.9628e+00 (2.9916e+00)	Acc@1 33.20 (3	
4.84) Acc@5 61.20 (61.13)		
Epoch: [1][490/2563] Time 0.931 (1.600) Data 0.262 (0.929) Loss 2.8527e+00 (2.9892e+00)	Acc@1 38.20 (3	
4.90) Acc@5 63.20 (61.17)		
Epoch: [1][500/2563] Time 1.034 (1.600) Data 0.372 (0.929) Loss 3.0854e+00 (2.9890e+00)	Acc@1 35.40 (3	
4.91) Acc@5 59.00 (61.17)	- 04 00 00 10	
Epoch: [1][510/2563] Time 1.594 (1.601) Data 0.930 (0.930) Loss 2.8338e+00 (2.9872e+00)	Acc@1 39.00 (3	
4.94) Acc@5 61.60 (61.20)	3. 01 35 00 (3	
Epoch: [1][520/2563] Time 0.944 (1.601) Data 0.278 (0.930) Loss 2.9545e+00 (2.9863e+00)	Acc@1 35.20 (3	
4.95) Acc@5 60.60 (61.21) Epoch: [1][530/2563] Time 0.882 (1.601) Data 0.218 (0.930) Loss 3.0170e+00 (2.9849e+00)	7-361 26 60 / 2	
	Acc@1 36.60 (3	
4.97) Acc@5 60.00 (61.22) Epoch: [1][540/2563] Time 0.791 (1.600) Data 0.127 (0.929) Loss 2.8562e+00 (2.9828e+00)	Acc@1 39.60 (3	
5.01) Acc@5 66.00 (61.26)	Accel 33.00 (3	
Epoch: [1][550/2563] Time 0.768 (1.600) Data 0.101 (0.929) Loss 2.7144e+00 (2.9809e+00)	Acc@1 38.00 (3	
5.04) Acc@5 66.20 (61.30)	110001 30:00 (3	
Epoch: [1][560/2563] Time 0.766 (1.600) Data 0.099 (0.929) Loss 3.0498e+00 (2.9800e+00)	Acc@1 32.40 (3	
5.05) Acc@5 59.20 (61.30)		
Epoch: [1][570/2563] Time 0.763 (1.599) Data 0.096 (0.928) Loss 2.9777e+00 (2.9785e+00)	Acc@1 38.00 (3	
5.08) Acc@5 60.80 (61.31)	, -	
Epoch: [1][580/2563] Time 0.833 (1.598) Data 0.168 (0.927) Loss 3.0792e+00 (2.9776e+00)	Acc@1 35.20 (3	
5.09) Acc@5 60.40 (61.33)	`	
Epoch: [1][590/2563] Time 1.349 (1.599) Data 0.680 (0.928) Loss 2.9009e+00 (2.9758e+00)	Acc@1 37.60 (3	
5.12) Acc@5 60.80 (61.36)		
Epoch: [1][600/2563] Time 1.940 (1.599) Data 1.276 (0.929) Loss 3.0643e+00 (2.9745e+00)	Acc@1 36.00 (3	_

5.14) Acc@5 58.40 (61.38)					
Epoch: [1][610/2563]	Time 1.963 (1.600)	Data	1.299 (0.929)	Loss 2.9308e+00 (2.9	729e+00) Acc@1	36.20 (3
5.16) Acc@5 59.20 (· · ·		,	`	,	`
Epoch: [1][620/2563]	Time 2.216 (1.600)	Data	1.551 (0.929)	Loss 2.8514e+00 (2.9	716e+00) Acc@1	37.60 (3
5.18) Acc@5 65.40 (·		,	`	,	`
Epoch: [1][630/2563]	Time 2.163 (1.599)	Data	1.500 (0.929)	Loss 2.9283e+00 (2.9	703e+00) Acc@1	34.80 (3
5.20) Acc@5 63.20 (·		,	`	,	`
Epoch: [1][640/2563]	Time 2.316 (1.599)	Data	1.650 (0.929)	Loss 2.8341e+00 (2.9	699e+00) Acc@1	37.40 (3
5.21) Acc@5 63.80 (·		(,	,	,
Epoch: [1][650/2563]	Time 2.337 (1.599)	Data	1.673 (0.928)	Loss 2.8595e+00 (2.9	682e+00) Acc@1	39.00 (3
5.24) Acc@5 63.60 (` ,		(,	,	()
Epoch: [1][660/2563]	Time 1.976 (1.599)	Data	1.312 (0.928)	Loss 2.8128e+00 (2.9	672e+00) Acc@1	36.80 (3
5.27) Acc@5 63.40 (,		- ()	,	,	()
Epoch: [1][670/2563]	Time 1.551 (1.599)	Data	0.883 (0.928)	Loss 2.8348e+00 (2.9	653e+00) Acc@1	39.00 (3
5.30) Acc@5 62.60 (·		()	(,	()
Epoch: [1][680/2563]	Time 1.663 (1.599)	Data	0.994 (0.928)	Loss 2.6473e+00 (2.9	629e+00) Acc@1	39.80 (3
5.33) Acc@5 67.60 (·		((,	()
Epoch: [1][690/2563]	Time 1.364 (1.598)	Data	0.700 (0.928)	Loss 2.8636e+00 (2.9	615e+00) Acc@1	36.60 (3
5.36) Acc@5 64.40 (·		()	(,	()
Epoch: [1][700/2563]	Time 1.026 (1.598)	Data	0.362 (0.927)	Loss 2.9146e+00 (2.9	597e+00) Acc@1	36.80 (3
5.40) Acc@5 61.60 (·		,	`	,	`
Epoch: [1][710/2563]	Time 0.761 (1.598)	Data	0.095 (0.928)	Loss 2.8682e+00 (2.9	584e+00) Acc@1	38.20 (3
5.41) Acc@5 64.00 (,		,	`	,	`
Epoch: [1][720/2563]	Time 0.913 (1.598)	Data	0.249 (0.927)	Loss 2.8664e+00 (2.9	572e+00) Acc@1	36.40 (3
5.44) Acc@5 64.60 (61.68)		,	•	,	,
Epoch: [1][730/2563]	Time 0.763 (1.598)	Data	0.098 (0.927)	Loss 2.8285e+00 (2.9	553e+00) Acc@1	38.00 (3
5.47) Acc@5 63.40 (61.71)		,	· ·	,	·
Epoch: [1][740/2563]	Time 0.869 (1.598)	Data	0.204 (0.927)	Loss 2.8947e+00 (2.9	544e+00) Acc@1	37.20 (3
5.49) Acc@5 61.40 (61.72)		,	· ·	,	·
Epoch: [1][750/2563]	Time 0.764 (1.598)	Data	0.097 (0.927)	Loss 2.7809e+00 (2.9	529e+00) Acc@1	40.00 (3
5.52) Acc@5 68.40 (61.76)					
Epoch: [1][760/2563]	Time 0.777 (1.598)	Data	0.112 (0.927)	Loss 2.7398e+00 (2.9	521e+00) Acc@1	42.80 (3
5.53) Acc@5 65.60 (61.77)					
Epoch: [1][770/2563]	Time 1.097 (1.598)	Data	0.436 (0.928)	Loss 2.8425e+00 (2.9	511e+00) Acc@1	36.00 (3
5.55) Acc@5 64.80 (61.79)					
Epoch: [1][780/2563]	Time 0.759 (1.598)	Data	0.096 (0.928)	Loss 2.8581e+00 (2.9	493e+00) Acc@1	38.60 (3
5.58) Acc@5 63.60 (61.81)					
Epoch: [1][790/2563]	Time 0.768 (1.598)	Data	0.102 (0.928)	Loss 2.7936e+00 (2.9	482e+00) Acc@1	38.20 (3
5.58) Acc@5 63.00 (61.83)					
Epoch: [1][800/2563]	Time 0.666 (1.599)	Data	0.002 (0.928)	Loss 2.8622e+00 (2.9	462e+00) Acc@1	33.80 (3
5.62) Acc@5 64.80 (61.86)					
Epoch: [1][810/2563]	Time 0.759 (1.599)	Data	0.097 (0.928)	Loss 2.9103e+00 (2.9	454e+00) Acc@1	36.80 (3
5.64) Acc@5 61.60 (61.87)					
Epoch: [1][820/2563]	Time 0.850 (1.599)	Data	0.185 (0.928)	Loss 2.9210e+00 (2.9	442e+00) Acc@1	35.80 (3
5.66) Acc@5 60.20 (61.89)					
Epoch: [1][830/2563]	Time 0.761 (1.599)	Data	0.099 (0.928)	Loss 2.9484e+00 (2.9	439e+00) Acc@1	37.40 (3
5.67) Acc@5 62.20 (-					
Epoch: [1][840/2563]	Time 0.761 (1.599)	Data	0.097 (0.928)	Loss 2.7702e+00 (2.9	427e+00) Acc@1	39.20 (3
5.70) Acc@5 65.60 (-					
Epoch: [1][850/2563]	Time 0.916 (1.599)	Data	0.253 (0.928)	Loss 2.9128e+00 (2.9	414e+00) Acc@1	35.20 (3
5.73) Acc@5 63.00 (61.94)					

Epoch: [1][860/2563]	Time 0.766 (1.5	99) Data	0.099 (0.928)	Loss 2.9896e+00 (2.9405e+00)	Acc@1 33.40 (3
5.74) Acc@5 60.20 (•				
Epoch: [1][870/2563] 5.76) Acc@5 63.80 (Time 0.769 (1.5	99) Data	0.103 (0.928)	Loss 2.8315e+00 (2.9396e+00)	Acc@1 38.20 (3
Epoch: [1][880/2563]	Time 0.759 (1.5	99) Data	0.097 (0.928)	Loss 3.0073e+00 (2.9385e+00)	Acc@1 36.20 (3
5.78) Acc@5 58.40 (-	, , ,	0.037 (0.320)	1000 0.00,00.00 (1.90000.00)	1100(1 00120 (0
Epoch: [1][890/2563]	Time 0.760 (1.5	99) Data	0.097 (0.929)	Loss 2.7354e+00 (2.9364e+00)	Acc@1 41.80 (3
5.82) Acc@5 65.00 (-	oo, baca	0.037 (0.323)	2000 21,700 10.00 (21,000 10.00)	1100(1 11100 (0
Epoch: [1][900/2563]	Time 1.248 (1.6	00) Data	0.581 (0.929)	Loss 2.5472e+00 (2.9349e+00)	Acc@1 43.20 (3
5.84) Acc@5 67.80 (-	50, 2000	(0001)		110001 10010 (0
Epoch: [1][910/2563]	Time 0.981 (1.6	00) Data	0.315 (0.930)	Loss 2.9331e+00 (2.9337e+00)	Acc@1 37.00 (3
5.87) Acc@5 63.60 (,		(,		
Epoch: [1][920/2563]	Time 1.600 (1.6	01) Data	0.935 (0.930)	Loss 2.8242e+00 (2.9322e+00)	Acc@1 37.00 (3
5.89) Acc@5 63.80 (-	,	,	,	•
Epoch: [1][930/2563]	Time 1.893 (1.6	01) Data	1.225 (0.930)	Loss 2.8344e+00 (2.9310e+00)	Acc@1 36.40 (3
5.90) Acc@5 63.40 (-	,	, ,	,	,
Epoch: [1][940/2563]	Time 1.885 (1.6	01) Data	1.217 (0.930)	Loss 2.8561e+00 (2.9297e+00)	Acc@1 36.20 (3
5.92) Acc@5 64.40 (62.14)				
Epoch: [1][950/2563]	Time 1.499 (1.6	01) Data	0.834 (0.931)	Loss 2.9139e+00 (2.9285e+00)	Acc@1 36.00 (3
5.94) Acc@5 61.20 (62.16)				
Epoch: [1][960/2563]	Time 1.056 (1.6	01) Data	0.390 (0.930)	Loss 2.8985e+00 (2.9272e+00)	Acc@1 36.60 (3
5.96) Acc@5 64.00 (•				
Epoch: [1][970/2563]	Time 0.889 (1.6	01) Data	0.225 (0.931)	Loss 2.8596e+00 (2.9258e+00)	Acc@1 36.20 (3
5.99) Acc@5 62.80 (
Epoch: [1][980/2563]	Time 0.761 (1.6	01) Data	0.097 (0.931)	Loss 2.7214e+00 (2.9241e+00)	Acc@1 39.60 (3
6.01) Acc@5 65.60 (•		0 000 / 0 001	- 0.0056 .00 .00 0000 .000	- 01 00 00 4 0
Epoch: [1][990/2563]	Time 0.669 (1.6	02) Data	0.002 (0.931)	Loss 2.8056e+00 (2.9232e+00)	Acc@1 39.80 (3
6.03) Acc@5 65.80 (•	02) Data	0 002 / 0 021)	Togg 2 706Foli00 (2 0217oli00)	7 C C C C C C C C C C C C C C C C C C C
Epoch: [1][1000/2563] 6.05) Acc@5 65.00 (Time 0.670 (1.6	UZ) Dala	0.002 (0.931)	Loss 2.7865e+00 (2.9217e+00)	Acc@1 38.20 (3
Epoch: [1][1010/2563]	•	02) Data	0.002 (0.932)	Loss 3.0042e+00 (2.9206e+00)	Acc@1 35.80 (3
6.06) Acc@5 58.40 (·	oz, baca	0.002 (0.752)	1055 3:00426100 (2:72006100)	ACCE1 33.00 (3
Epoch: [1][1020/2563]	•	02) Data	0.002 (0.931)	Loss 2.7889e+00 (2.9187e+00)	Acc@1 37.80 (3
6.10) Acc@5 64.00 (•	02) 2000	0.002 (0.501)	1000 11,0000 (11,010,000)	110001 37100 (3
Epoch: [1][1030/2563]		02) Data	0.002 (0.931)	Loss 2.8019e+00 (2.9176e+00)	Acc@1 42.40 (3
6.13) Acc@5 65.00 (-	,	,	,	•
Epoch: [1][1040/2563]	Time 0.666 (1.6	03) Data	0.002 (0.931)	Loss 2.8362e+00 (2.9168e+00)	Acc@1 38.60 (3
6.14) Acc@5 63.40 (62.38)	,			·
Epoch: [1][1050/2563]	Time 0.671 (1.6	03) Data	0.002 (0.931)	Loss 2.7990e+00 (2.9160e+00)	Acc@1 35.40 (3
6.15) Acc@5 64.20 (62.39)				
Epoch: [1][1060/2563]	Time 0.670 (1.6	03) Data	0.003 (0.932)	Loss 2.7892e+00 (2.9141e+00)	Acc@1 40.20 (3
6.19) Acc@5 63.60 (62.43)				
Epoch: [1][1070/2563]	Time 0.762 (1.6	03) Data	0.096 (0.931)	Loss 2.9601e+00 (2.9131e+00)	Acc@1 36.80 (3
6.21) Acc@5 63.80 (•				
Epoch: [1][1080/2563]	Time 0.669 (1.6	03) Data	0.003 (0.932)	Loss 2.6844e+00 (2.9119e+00)	Acc@1 40.80 (3
6.25) Acc@5 65.80 (•				- 04
Epoch: [1][1090/2563]	Time 0.668 (1.6	03) Data	0.003 (0.931)	Loss 2.7523e+00 (2.9104e+00)	Acc@1 41.40 (3
6.28) Acc@5 65.00 (•	00) - :	0 000 / 0 001	T 0. 0700	301 27 22 4 2
Epoch: [1][1100/2563]	Time 0.668 (1.6	ບ3) Data	0.003 (0.931)	Loss 2.8728e+00 (2.9094e+00)	Acc@1 37.20 (3
6.30) Acc@5 61.80 (·	U3) Dai -	0 002 / 0 021	Togg 2 02000100 (2 000E2100)	Accel 20 00 / 2
Epoch: [1][1110/2563]	Time 0.668 (1.6	us) Data	0.003 (0.931)	Loss 2.8398e+00 (2.9085e+00)	Acc@1 38.00 (3

```
6.31)
       Acc@5 64.60 ( 62.53)
Epoch: [1][1120/2563]
                       Time 0.666 (1.603)
                                              Data 0.002 ( 0.931)
                                                                      Loss 2.7927e+00 (2.9078e+00)
                                                                                                     Acc@1 37.80 ( 3
6.34)
       Acc@5 63.40 ( 62.55)
Epoch: [1][1130/2563]
                       Time 0.666 (1.603)
                                              Data 0.003 ( 0.931)
                                                                      Loss 2.6990e+00 (2.9065e+00)
                                                                                                     Acc@1 39.80 ( 3
       Acc@5 69.00 ( 62.57)
6.36)
                                                                                                     Acc@1 36.80 ( 3
Epoch: [1][1140/2563]
                       Time 0.669 (1.603)
                                              Data 0.003 ( 0.931)
                                                                      Loss 2.8229e+00 (2.9059e+00)
6.36)
       Acc@5 64.80 ( 62.58)
Epoch: [1][1150/2563]
                       Time 0.762 (1.604)
                                              Data 0.097 ( 0.932)
                                                                      Loss 2.9484e+00 (2.9050e+00)
                                                                                                     Acc@1 33.80 ( 3
6.38)
       Acc@5 61.80 ( 62.60)
Epoch: [1][1160/2563]
                       Time 1.020 (1.604)
                                              Data 0.357 ( 0.932)
                                                                      Loss 2.9742e+00 (2.9043e+00)
                                                                                                     Acc@1 37.20 ( 3
6.39)
       Acc@5 62.00 ( 62.62)
Epoch: [1][1170/2563]
                       Time 1.190 ( 1.604)
                                              Data 0.525 ( 0.932)
                                                                      Loss 2.7579e+00 (2.9035e+00)
                                                                                                     Acc@1 36.40 ( 3
6.40)
       Acc@5 62.40 ( 62.64)
Epoch: [1][1180/2563]
                       Time 1.120 ( 1.604)
                                              Data 0.457 ( 0.932)
                                                                      Loss 2.8741e+00 (2.9027e+00)
                                                                                                     Acc@1 38.20 ( 3
6.42)
       Acc@5 63.00 ( 62.65)
Epoch: [1][1190/2563]
                       Time 1.425 ( 1.604)
                                              Data 0.758 ( 0.932)
                                                                      Loss 2.8047e+00 (2.9015e+00)
                                                                                                     Acc@1 38.40 ( 3
6.44)
       Acc@5 64.40 ( 62.67)
                       Time 1.648 ( 1.604)
                                              Data 0.982 ( 0.933)
                                                                      Loss 3.1625e+00 (2.9010e+00)
                                                                                                     Acc@1 34.00 ( 3
Epoch: [1][1200/2563]
6.46)
       Acc@5 58.80 ( 62.68)
                                              Data 1.168 ( 0.933)
                                                                                                     Acc@1 40.00 ( 3
Epoch: [1][1210/2563]
                       Time 1.832 ( 1.605)
                                                                      Loss 2.6641e+00 (2.8999e+00)
6.47)
       Acc@5 67.00 ( 62.70)
                       Time 1.727 ( 1.605)
                                              Data 1.060 ( 0.933)
                                                                      Loss 2.9425e+00 (2.8990e+00)
                                                                                                     Acc@1 33.20 ( 3
Epoch: [1][1220/2563]
6.48)
       Acc@5 63.40 ( 62.72)
Epoch: [1][1230/2563]
                       Time 1.658 ( 1.605)
                                              Data 0.994 ( 0.933)
                                                                      Loss 2.6733e+00 (2.8982e+00)
                                                                                                     Acc@1 41.80 ( 3
6.50)
       Acc@5 66.80 ( 62.73)
Epoch: [1][1240/2563]
                       Time 1.371 ( 1.605)
                                              Data 0.707 ( 0.933)
                                                                      Loss 2.7537e+00 (2.8972e+00)
                                                                                                     Acc@1 40.80 ( 3
6.51)
       Acc@5 64.60 ( 62.75)
Epoch: [1][1250/2563]
                       Time 1.207 ( 1.604)
                                              Data 0.542 ( 0.933)
                                                                      Loss 2.9019e+00 (2.8965e+00)
                                                                                                     Acc@1 35.00 ( 3
       Acc@5 61.20 ( 62.77)
6.52)
Epoch: [1][1260/2563]
                       Time 1.920 ( 1.605)
                                              Data 1.256 ( 0.933)
                                                                      Loss 2.7664e+00 (2.8954e+00)
                                                                                                     Acc@1 37.80 ( 3
6.54) Acc@5 66.20 (62.79)
Epoch: [1][1270/2563]
                       Time 2.100 ( 1.605)
                                              Data 1.435 ( 0.934)
                                                                      Loss 2.7552e+00 (2.8945e+00)
                                                                                                     Acc@1 38.20 ( 3
6.55) Acc@5 65.00 ( 62.80)
Epoch: [1][1280/2563]
                       Time 2.089 (1.605)
                                              Data 1.424 ( 0.934)
                                                                      Loss 2.7762e+00 (2.8940e+00)
                                                                                                     Acc@1 38.00 ( 3
6.57) Acc@5 65.80 ( 62.81)
Epoch: [1][1290/2563]
                       Time 1.786 (1.605)
                                              Data 1.122 ( 0.933)
                                                                      Loss 2.7125e+00 (2.8925e+00)
                                                                                                     Acc@1 39.60 ( 3
6.59) Acc@5 67.60 ( 62.84)
Epoch: [1][1300/2563]
                       Time 2.227 (1.605)
                                              Data 1.560 ( 0.934)
                                                                      Loss 2.7904e+00 (2.8916e+00)
                                                                                                     Acc@1 35.60 ( 3
       Acc@5 65.80 ( 62.85)
6.61)
                                                                                                     Acc@1 41.80 ( 3
Epoch: [1][1310/2563]
                       Time 1.892 (1.605)
                                              Data 1.227 ( 0.934)
                                                                      Loss 2.7419e+00 (2.8906e+00)
6.63)
       Acc@5 65.00 ( 62.87)
Epoch: [1][1320/2563]
                       Time 1.388 (1.605)
                                              Data 0.721 ( 0.933)
                                                                      Loss 2.9030e+00 (2.8897e+00)
                                                                                                     Acc@1 34.60 ( 3
6.64)
       Acc@5 64.60 ( 62.89)
Epoch: [1][1330/2563]
                       Time 1.882 ( 1.605)
                                              Data 1.218 ( 0.934)
                                                                      Loss 2.8380e+00 (2.8891e+00)
                                                                                                     Acc@1 38.20 ( 3
6.66)
       Acc@5 63.80 ( 62.90)
Epoch: [1][1340/2563]
                       Time 2.335 (1.605)
                                              Data 1.668 ( 0.934)
                                                                      Loss 2.7550e+00 (2.8885e+00)
                                                                                                     Acc@1 41.20 ( 3
6.67)
       Acc@5 64.40 ( 62.91)
Epoch: [1][1350/2563]
                       Time 2.394 (1.605)
                                              Data 1.729 ( 0.934)
                                                                      Loss 2.7490e+00 (2.8876e+00)
                                                                                                     Acc@1 41.60 ( 3
6.69)
       Acc@5 63.80 ( 62.93)
                       Time 2.364 ( 1.605)
Epoch: [1][1360/2563]
                                              Data 1.702 ( 0.934)
                                                                      Loss 2.6449e+00 (2.8864e+00)
                                                                                                     Acc@1 39.00 ( 3
6.71)
       Acc@5 70.00 ( 62.95)
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Epoch: [1][1370/2563]	Time 2.348 (1.60	5) Data	1.680 (0.934)	Loss 2.6843e+00 (2.8855e+00)	Acc@1 38.40 (3
6.72) Acc@5 64.40 (•				
Epoch: [1][1380/2563] 6.74) Acc@5 65.40 (Time 2.550 (1.60	5) Data	1.836 (0.934)	Loss 2.7490e+00 (2.8842e+00)	Acc@1 39.80 (3
Epoch: [1][1390/2563]	Time 2.212 (1.60	5) Data	1.547 (0.934)	Loss 2.6381e+00 (2.8830e+00)	Acc@1 40.00 (3
6.76) Acc@5 68.40 (•	3, 2464	1.31, (0.331)	1000 1100010:00 (1100000:00)	110001 10000 (0
Epoch: [1][1400/2563]	Time 1.459 (1.60	5) Data	0.792 (0.934)	Loss 2.7574e+00 (2.8820e+00)	Acc@1 38.60 (3
6.78) Acc@5 66.20 (•	5, 5464	01/32 (01/301)	2000 21/3/10:00 (2100200:00)	110001 00100 (0
Epoch: [1][1410/2563]	Time 1.240 (1.60	5) Data	0.575 (0.934)	Loss 2.6453e+00 (2.8809e+00)	Acc@1 38.80 (3
6.80) Acc@5 66.40 (•	o, 2000	(01301)	2000 2001000 (2000000)	110001 00000 (0
Epoch: [1][1420/2563]	Time 1.360 (1.60	5) Data	0.696 (0.934)	Loss 2.6577e+00 (2.8798e+00)	Acc@1 39.00 (3
6.82) Acc@5 67.80 (•	o, 2000	(01301)	2000 2000,70000 (200,900,00)	110001 03100 (0
Epoch: [1][1430/2563]	Time 1.638 (1.60	5) Data	0.970 (0.934)	Loss 2.7984e+00 (2.8787e+00)	Acc@1 40.00 (3
6.83) Acc@5 64.20 (•	-,	();;;		
Epoch: [1][1440/2563]	Time 1.811 (1.60	5) Data	1.144 (0.934)	Loss 2.8922e+00 (2.8776e+00)	Acc@1 36.00 (3
6.85) Acc@5 64.00 (•	,	,	,	,
Epoch: [1][1450/2563]	Time 1.653 (1.60	5) Data	0.988 (0.934)	Loss 2.7274e+00 (2.8764e+00)	Acc@1 40.00 (3
6.88) Acc@5 68.80 (63.14)				
Epoch: [1][1460/2563]	Time 1.670 (1.60	5) Data	1.007 (0.934)	Loss 2.7031e+00 (2.8752e+00)	Acc@1 38.00 (3
6.90) Acc@5 67.80 (63.16)				
Epoch: [1][1470/2563]	Time 1.353 (1.60	5) Data	0.691 (0.934)	Loss 2.7009e+00 (2.8738e+00)	Acc@1 40.80 (3
6.92) Acc@5 66.60 (63.18)				
Epoch: [1][1480/2563]	Time 1.478 (1.60	5) Data	0.813 (0.934)	Loss 2.7567e+00 (2.8732e+00)	Acc@1 39.20 (3
6.92) Acc@5 64.80 (
Epoch: [1][1490/2563]	Time 1.408 (1.60	5) Data	0.742 (0.934)	Loss 2.7198e+00 (2.8721e+00)	Acc@1 41.00 (3
6.94) Acc@5 66.00 (•				- 04 44 00 4 0
Epoch: [1][1500/2563]	Time 0.926 (1.60	4) Data	0.258 (0.934)	Loss 2.5678e+00 (2.8710e+00)	Acc@1 41.80 (3
6.96) Acc@5 68.00 (•	4) D-1-	0 100 / 0 000	T = = 2	301 20 00 / 2
Epoch: [1][1510/2563] 6.99) Acc@5 71.80 (Time 0.795 (1.60	4) Data	0.129 (0.933)	Loss 2.5453e+00 (2.8698e+00)	Acc@1 38.80 (3
Epoch: [1][1520/2563]	•	5) Data	0.002 (0.934)	Loss 2.9442e+00 (2.8689e+00)	Acc@1 35.20 (3
7.01) Acc@5 63.20 (•	J) Data	0.002 (0.934)	LOSS 2.9442e+00 (2.0009e+00)	ACCE1 33.20 (3
Epoch: [1][1530/2563]	•	4) Data	0.096 (0.933)	Loss 2.6021e+00 (2.8680e+00)	Acc@1 43.60 (3
7.02) Acc@5 69.60 (•	4) Data	0.000 (0.000)	1035 2:00210:00 (2:00000:00)	10061 43:00 (3
Epoch: [1][1540/2563]	•	4) Data	0.097 (0.933)	Loss 2.7456e+00 (2.8670e+00)	Acc@1 43.00 (3
7.04) Acc@5 66.20 (•	-, -:	();;;		
Epoch: [1][1550/2563]	Time 0.761 (1.60	4) Data	0.098 (0.933)	Loss 2.7019e+00 (2.8658e+00)	Acc@1 38.60 (3
7.06) Acc@5 64.80 (· ·	,	,	,	,
Epoch: [1][1560/2563]	Time 0.761 (1.60	4) Data	0.098 (0.933)	Loss 2.7233e+00 (2.8647e+00)	Acc@1 39.00 (3
7.08) Acc@5 65.20 (63.35)				
Epoch: [1][1570/2563]	Time 0.936 (1.60	4) Data	0.271 (0.933)	Loss 2.7825e+00 (2.8638e+00)	Acc@1 37.20 (3
7.10) Acc@5 62.80 (63.37)				
Epoch: [1][1580/2563]	Time 0.762 (1.60	4) Data	0.097 (0.933)	Loss 2.8371e+00 (2.8631e+00)	Acc@1 40.40 (3
7.11) Acc@5 62.60 (63.38)				
Epoch: [1][1590/2563]	Time 0.857 (1.60	4) Data	0.193 (0.933)	Loss 2.6568e+00 (2.8622e+00)	Acc@1 40.80 (3
7.12) Acc@5 67.00 (·				
Epoch: [1][1600/2563]	Time 0.759 (1.60	4) Data	0.098 (0.933)	Loss 2.6923e+00 (2.8613e+00)	Acc@1 37.20 (3
7.14) Acc@5 65.40 (·	. - :	0.000 (0.000	T	7
Epoch: [1][1610/2563]	Time 0.670 (1.60	4) Data	0.002 (0.933)	Loss 2.7192e+00 (2.8601e+00)	Acc@1 41.00 (3
7.16) Acc@5 66.40 (·	4) 5 -1-	0 000 / 0 0335	Taga 2 047Fa100 (2 0F01-:00)	701 26 40 42
Epoch: [1][1620/2563]	Time 0.764 (1.60	4) Data	0.098 (0.933)	Loss 2.8475e+00 (2.8591e+00)	Acc@1 36.40 (3

7.17) Acc@5 62.80 (63.44)					
	1.272 (1.605)	Data	0.605 (0.934)	Loss 2.7330e+00 (2.8581e+00)	Acc@1	38.60 (3
7.19) Acc@5 65.40 (63.46	•		,	(1111)		(
	1.254 (1.605)	Data	0.590 (0.934)	Loss 2.7299e+00 (2.8569e+00)	Acc@1	41.60 (3
7.21) Acc@5 63.80 (63.48	•		,	,		•
Epoch: [1][1650/2563] Time	1.319 (1.605)	Data	0.654 (0.934)	Loss 2.5617e+00 (2.8557e+00)	Acc@1	41.20 (3
7.22) Acc@5 69.00 (63.50)					
Epoch: [1][1660/2563] Time	1.582 (1.605)	Data	0.919 (0.934)	Loss 2.5267e+00 (2.8545e+00)	Acc@1	45.60 (3
7.24) Acc@5 67.80 (63.52)					
Epoch: [1][1670/2563] Time	1.473 (1.605)	Data	0.808 (0.934)	Loss 2.7400e+00 (2.8535e+00)	Acc@1	39.80 (3
7.26) Acc@5 66.40 (63.54)					
	1.469 (1.605)	Data	0.802 (0.934)	Loss 2.6285e+00 (2.8524e+00)	Acc@1	42.00 (3
7.27) Acc@5 68.60 (63.56	-					
	0.968 (1.605)	Data	0.304 (0.934)	Loss 2.6097e+00 (2.8514e+00)	Acc@1	40.20 (3
7.29) Acc@5 68.60 (63.57	-					
	0.766 (1.605)	Data	0.100 (0.934)	Loss 2.6985e+00 (2.8504e+00)	Acc@1	40.60 (3
7.31) Acc@5 67.40 (63.59	-					
	0.668 (1.605)	Data	0.002 (0.934)	Loss 2.5838e+00 (2.8497e+00)	Acc@1	42.40 (3
7.32) Acc@5 67.80 (63.60						
	0.669 (1.605)	Data	0.003 (0.934)	Loss 2.6009e+00 (2.8488e+00)	Acc@1	38.60 (3
7.34) Acc@5 68.00 (63.62	-		0 100 (0 004)	- 0.6106 .00 .00 0450 .000	- 01	41 40 (0
	0.764 (1.605)	Data	0.100 (0.934)	Loss 2.6106e+00 (2.8479e+00)	ACC@1	41.40 (3
7.35) Acc@5 67.00 (63.64		Data	0 104 (0 024)	Taga 2 (004a100 /2 0466a100)	701	27 00 / 2
Epoch: [1][1740/2563] Time 7.37) Acc@5 67.60 (63.66	0.772 (1.605)	рата	0.104 (0.934)	Loss 2.6984e+00 (2.8466e+00)	ACCUI	37.80 (3
	1.039 (1.605)	Data	0.375 (0.934)	Loss 2.7405e+00 (2.8457e+00)	70001	37.20 (3
7.38) Acc@5 65.00 (63.67	•	раса	0.373 (0.934)	LOSS 2.7403e+00 (2.8437e+00)	ACCEI	37.20 (3
	0.772 (1.605)	Da+a	0.106 (0.934)	Loss 2.5125e+00 (2.8446e+00)	Acce 1	42.60 (3
7.41) Acc@5 68.20 (63.69	•	Data	0.100 (0.754)	1035 2.31236 00 (2.04406 00)	ACCEI	42.00 (3
	0.671 (1.605)	Data	0.002 (0.933)	Loss 2.6475e+00 (2.8435e+00)	Acc@1	42.00 (3
7.43) Acc@5 67.00 (63.71	•	Ducu	0.002 (0.300)	2000 2001/30/00 (2001030/00)	110001	12100 (3
	0.811 (1.605)	Data	0.145 (0.933)	Loss 2.7169e+00 (2.8425e+00)	Acc@1	39.60 (3
7.45) Acc@5 64.40 (63.72	•		(,			()
	0.667 (1.605)	Data	0.003 (0.933)	Loss 2.6664e+00 (2.8414e+00)	Acc@1	38.80 (3
7.46) Acc@5 65.60 (63.74	•		,	,		`
	0.669 (1.604)	Data	0.002 (0.933)	Loss 2.7516e+00 (2.8405e+00)	Acc@1	41.80 (3
7.48) Acc@5 66.40 (63.76))					
Epoch: [1][1810/2563] Time	0.670 (1.604)	Data	0.002 (0.933)	Loss 2.5774e+00 (2.8395e+00)	Acc@1	39.80 (3
7.50) Acc@5 66.00 (63.78)					
Epoch: [1][1820/2563] Time	0.764 (1.604)	Data	0.099 (0.933)	Loss 2.6124e+00 (2.8387e+00)	Acc@1	41.80 (3
7.51) Acc@5 68.20 (63.79)					
	0.673 (1.604)	Data	0.003 (0.933)	Loss 2.5084e+00 (2.8376e+00)	Acc@1	42.40 (3
7.53) Acc@5 67.20 (63.81)					
	0.667 (1.604)	Data	0.002 (0.933)	Loss 2.5446e+00 (2.8364e+00)	Acc@1	42.80 (3
7.55) Acc@5 67.60 (63.83	•					
	0.771 (1.605)	Data	0.104 (0.933)	Loss 2.6100e+00 (2.8356e+00)	Acc@1	42.40 (3
7.57) Acc@5 68.40 (63.84	•					
	0.916 (1.604)	Data	0.253 (0.933)	Loss 2.7619e+00 (2.8348e+00)	Acc@1	39.60 (3
7.58) Acc@5 64.60 (63.85	•	5	0.017 / 0.000	T	3 . 0 .	47 00 1 0
	1.484 (1.605)	Data	0.817 (0.933)	Loss 2.3262e+00 (2.8336e+00)	Acc@1	47.80 (3
7.60) Acc@5 71.60 (63.87)					

Epoch: [1][1880/2563]	Time 1.963 (1.60	5) Data	1.302 (0.934)	Loss 2.5158e+00 (2.8326e+00)	Acc@1 42.00 (3
7.62) Acc@5 69.40 (•				
Epoch: [1][1890/2563]	Time 2.321 (1.60!	5) Data	1.658 (0.934)	Loss 2.5678e+00 (2.8314e+00)	Acc@1 39.00 (3
7.64) Acc@5 69.60 (•		1 (00 / 0 00 /)	- 0.5400 .00 .00 .000	- 01 41 00 4 0
Epoch: [1][1900/2563]	Time 2.345 (1.60!	b) Data	1.683 (0.934)	Loss 2.5482e+00 (2.8302e+00)	Acc@1 41.80 (3
7.66) Acc@5 68.40 (•	F.)	1 606 / 0 004)	T	701 20 00 (2
Epoch: [1][1910/2563]	Time 2.291 (1.60!	b) Data	1.626 (0.934)	Loss 2.6135e+00 (2.8291e+00)	Acc@1 39.20 (3
7.67) Acc@5 67.40 (•	F.\ D-1-	1 000 / 0 024)	T 2 4000-100 (2 0200-100)	7
Epoch: [1][1920/2563]	Time 2.467 (1.60!	o) Data	1.800 (0.934)	Loss 2.4869e+00 (2.8280e+00)	Acc@1 42.80 (3
7.70) Acc@5 70.80 (•	E) Doto	1 202 / 0 024)	Taga 2 (2(0a)00 (2 02(4a)00)	701 20 20 / 2
Epoch: [1][1930/2563] 7.73) Acc@5 69.20 (Time 2.055 (1.60!	o) Data	1.392 (0.934)	Loss 2.6369e+00 (2.8264e+00)	Acc@1 39.20 (3
Epoch: [1][1940/2563]	Time 2.403 (1.60	5) Data	1.713 (0.934)	Loss 2.6580e+00 (2.8255e+00)	Acc@1 41.60 (3
7.74) Acc@5 68.00 (•	o) Data	1.713 (0.934)	LOSS 2.03000+00 (2.02330+00)	ACCE1 41.00 (3
Epoch: [1][1950/2563]	Time 2.199 (1.60!	5) Da+a	1.533 (0.934)	Loss 2.6786e+00 (2.8246e+00)	Acc@1 40.80 (3
7.76) Acc@5 66.80 (•	J) Data	1.333 (0.334)	LOSS 2:0700e100 (2:0240e100)	ACCET 40.00 (3
Epoch: [1][1960/2563]	Time 2.812 (1.60!	5) Data	2.087 (0.934)	Loss 2.7480e+00 (2.8236e+00)	Acc@1 39.80 (3
7.78) Acc@5 66.60 (•	o, baca	2.007 (0.554)	1033 2.74000.00 (2.02300.00)	MCC61 33.00 (3
Epoch: [1][1970/2563]	Time 2.462 (1.60!	5) Data	1.793 (0.934)	Loss 2.7949e+00 (2.8228e+00)	Acc@1 36.40 (3
7.79) Acc@5 65.40 (•	o, baca	1.755 (0.551)	1000 2.75 150.00 (2.02200.00)	1100(1 30.10 (3
Epoch: [1][1980/2563]	Time 2.226 (1.60!	5) Data	1.558 (0.934)	Loss 2.6533e+00 (2.8218e+00)	Acc@1 41.20 (3
7.81) Acc@5 67.00 (•	2434	11333 (31341)		110001 11010 (0
Epoch: [1][1990/2563]	•	5) Data	1.702 (0.934)	Loss 2.5759e+00 (2.8208e+00)	Acc@1 42.60 (3
7.82) Acc@5 68.20 (•	,	,	,	
Epoch: [1][2000/2563]	•	5) Data	1.465 (0.934)	Loss 2.6182e+00 (2.8197e+00)	Acc@1 41.20 (3
7.85) Acc@5 66.60 (•	•	,	,	•
Epoch: [1][2010/2563]	Time 1.760 (1.60	5) Data	1.093 (0.934)	Loss 2.6745e+00 (2.8187e+00)	Acc@1 39.60 (3
7.86) Acc@5 68.20 (64.13)				
Epoch: [1][2020/2563]	Time 1.952 (1.60	5) Data	1.291 (0.934)	Loss 2.7055e+00 (2.8178e+00)	Acc@1 41.00 (3
7.88) Acc@5 66.40 (64.15)				
Epoch: [1][2030/2563]	Time 1.865 (1.60	5) Data	1.197 (0.933)	Loss 2.6503e+00 (2.8165e+00)	Acc@1 41.20 (3
7.90) Acc@5 67.20 (64.17)				
Epoch: [1][2040/2563]	•	4) Data	1.223 (0.933)	Loss 2.5236e+00 (2.8158e+00)	Acc@1 41.00 (3
7.91) Acc@5 70.20 (•				
Epoch: [1][2050/2563]	•	5) Data	1.577 (0.934)	Loss 2.7552e+00 (2.8149e+00)	Acc@1 41.60 (3
7.93) Acc@5 66.80 (•				
Epoch: [1][2060/2563]	Time 2.483 (1.60	5) Data	1.766 (0.934)	Loss 2.6525e+00 (2.8140e+00)	Acc@1 42.00 (3
7.95) Acc@5 67.60 (•				
Epoch: [1][2070/2563]	Time 2.597 (1.60	5) Data	1.882 (0.933)	Loss 2.5130e+00 (2.8129e+00)	Acc@1 43.00 (3
7.97) Acc@5 67.80 (·				
Epoch: [1][2080/2563]	Time 2.329 (1.604	4) Data	1.667 (0.933)	Loss 2.6315e+00 (2.8119e+00)	Acc@1 41.40 (3
7.98) Acc@5 67.60 (•				- 04 44 00 10
Epoch: [1][2090/2563]	Time 2.322 (1.604	4) Data	1.656 (0.933)	Loss 2.6994e+00 (2.8110e+00)	Acc@1 41.00 (3
8.00) Acc@5 65.40 (•	4)	1 000 / 0 022	T 0. 4611. +00. +0. 0100. +000	701 41 00 (2
Epoch: [1][2100/2563]	Time 2.471 (1.604	4) Data	1.808 (0.933)	Loss 2.4611e+00 (2.8100e+00)	Acc@1 41.20 (3
8.01) Acc@5 68.60 (•	1) Dat-	1 226 / 0 0223	Togg 2 E4240100 (2 00020100)	70001 44 20 4 2
Epoch: [1][2110/2563]	Time 1.991 (1.604	ч, рата	1.326 (0.933)	Loss 2.5424e+00 (2.8092e+00)	Acc@1 44.20 (3
8.03) Acc@5 69.80 (·	1) Data	1 150 / 0 022	Iogg 2 4770o±00 (2 0002o±00)	70001 42 60 4 2
Epoch: [1][2120/2563]	Time 1.819 (1.604	н) рата	1.158 (0.933)	Loss 2.4770e+00 (2.8082e+00)	Acc@1 42.60 (3
8.04) Acc@5 72.60 (·	1) Da+a	1 0/0 / 0 0221	Togg 2 70750±00 (2 00760100)	AGGA1 36 60 / 2
Epoch: [1][2130/2563]	Time 1.709 (1.604	ı, Dala	1.049 (0.933)	Loss 2.7975e+00 (2.8076e+00)	Acc@1 36.60 (3

8.05) Acc@5 65.00 (64.33)							
Epoch: [1][2140/2563]	Time 1.31	1 (1.604)	Data	0.650 (0.933)	Loss 2.4542e+00	(2.8066e+00)	Acc@1	42.80 (3
8.07) Acc@5 69.60 (,		` ,		,		•
Epoch: [1][2150/2563]	Time 1.72	4 (1.604)	Data	1.058 (0.933)	Loss 2.6923e+00	(2.8058e+00)	Acc@1	40.00 (3
8.09) Acc@5 64.20 (64.36)							
Epoch: [1][2160/2563]	Time 1.82	0 (1.604)	Data	1.154 (0.933)	Loss 2.5058e+00	(2.8047e+00)	Acc@1	43.60 (3
8.11) Acc@5 69.20 (64.38)							
Epoch: [1][2170/2563]	Time 1.70	1 (1.604)	Data	1.035 (0.933)	Loss 2.5678e+00	(2.8038e+00)	Acc@1	42.60 (3
8.12) Acc@5 67.60 (64.39)							
Epoch: [1][2180/2563]	Time 1.84	7 (1.604)	Data	1.183 (0.933)	Loss 2.6013e+00	(2.8030e+00)	Acc@1	43.80 (3
8.14) Acc@5 68.20 (•							
Epoch: [1][2190/2563]	Time 1.58	7 (1.604)	Data	0.922 (0.933)	Loss 2.6099e+00	(2.8018e+00)	Acc@1	40.80 (3
8.15) Acc@5 68.40 (•							
Epoch: [1][2200/2563]	Time 1.81	4 (1.604)	Data	1.151 (0.933)	Loss 2.5237e+00	(2.8009e+00)	Acc@1	43.20 (3
8.17) Acc@5 68.40 (•							
Epoch: [1][2210/2563]	Time 1.36!	5 (1.603)	Data	0.699 (0.933)	Loss 2.6617e+00	(2.8000e+00)	Acc@1	44.40 (3
8.19) Acc@5 69.20 (- 04	
Epoch: [1][2220/2563]	Time 1.05	7 (1.603)	Data	0.391 (0.933)	Loss 2.5602e+00	(2.7992e+00)	Acc@1	42.40 (3
8.21) Acc@5 68.80 (•	c	D . 1 .	0 400 (0 000)	T	(0.7002.100)	3 0 1	40 60 (2
Epoch: [1][2230/2563]	Time 1.14	6 (1.603)	рата	0.482 (0.933)	Loss 2.6269e+00	(2./983e+00)	ACC@1	40.60 (3
8.22) Acc@5 69.80 (Epoch: [1][2240/2563]	Time 1.01	7 (1 602)	Data	0.352 (0.933)	Loss 2.4331e+00	(2 70720±00)	7.00.01	45.20 (3
8.24) Acc@5 69.20 (/ (1.603)	Data	0.332 (0.933)	LOSS 2.4331E+00	(2.79730+00)	ACCUI	45.20 (3
Epoch: [1][2250/2563]	Time 1.17	2 (1 603)	Data	0.507 (0.933)	Loss 2.5250e+00	(2 79640+00)	Acc@1	45.40 (3
8.26) Acc@5 66.00 (2 (1:003)	Ducu	0.307 (0.333)	1055 2:52500100	(2.75040100)	ACCEI	13.10 (3
Epoch: [1][2260/2563]	Time 1.48	6 (1.604)	Data	0.823 (0.933)	Loss 2.5052e+00	(2.7955e+00)	Acc@1	42.40 (3
8.27) Acc@5 68.80 (0 (10001)	Ducu	(0.300)	2000 2100020.00	(21,73350.00)	110001	12010 (0
Epoch: [1][2270/2563]	Time 1.14	1 (1.603)	Data	0.480 (0.933)	Loss 2.5097e+00	(2.7947e+00)	Acc@1	45.20 (3
8.29) Acc@5 66.60 (,		,		,		`
Epoch: [1][2280/2563]	Time 1.20	4 (1.603)	Data	0.537 (0.933)	Loss 2.6549e+00	(2.7937e+00)	Acc@1	42.40 (3
8.30) Acc@5 68.40 (,		,		,		•
Epoch: [1][2290/2563]	Time 1.39	3 (1.603)	Data	0.726 (0.933)	Loss 2.4516e+00	(2.7927e+00)	Acc@1	43.40 (3
8.32) Acc@5 71.20 (64.59)							
Epoch: [1][2300/2563]	Time 1.599	9 (1.603)	Data	0.932 (0.933)	Loss 2.4470e+00	(2.7915e+00)	Acc@1	45.20 (3
8.34) Acc@5 70.00 (64.61)							
Epoch: [1][2310/2563]	Time 1.55	4 (1.603)	Data	0.889 (0.933)	Loss 2.5640e+00	(2.7906e+00)	Acc@1	42.00 (3
8.35) Acc@5 68.60 (64.62)							
Epoch: [1][2320/2563]	Time 1.69	7 (1.603)	Data	1.029 (0.933)	Loss 2.6074e+00	(2.7896e+00)	Acc@1	43.20 (3
8.37) Acc@5 68.60 (,							
Epoch: [1][2330/2563]	Time 1.812	2 (1.603)	Data	1.144 (0.933)	Loss 2.5103e+00	(2.7885e+00)	Acc@1	43.40 (3
8.39) Acc@5 68.20 (•							
Epoch: [1][2340/2563]	Time 1.373	3 (1.603)	Data	0.710 (0.933)	Loss 2.5840e+00	(2.7878e+00)	Acc@1	40.20 (3
8.40) Acc@5 69.20 (•	4 4 1 602)	D . 1 .	1 150 (0 000)	T 0 . F.2.1.0	(0.706000)	3 0 1	42 60 / 2
Epoch: [1][2350/2563]	Time 1.81	4 (1.603)	Data	1.150 (0.933)	Loss 2.5310e+00	(2./869e+00)	ACC@1	43.60 (3
8.42) Acc@5 70.00 (•	0 (1 602)	Data	1 455 (0 022)	Togg 2 70200100	(2 70500100)	7 ~ ~ 6 1	40 20 / 2
Epoch: [1][2360/2563]	Time 2.118	0 (1.003)	Data	1.455 (0.933)	Loss 2.7038e+00	(2.76590+00)	ACCUI	40.20 (3
8.44) Acc@5 66.40 (Epoch: [1][2370/2563]	Time 2.16	1 (1 603)	Data	1.497 (0.933)	Loss 2.6061e+00	(2 78/190+00)	Acc 0 1	42.00 (3
8.46) Acc@5 65.80 (1 (1.003)	Dala	1.471 (0.333)	TO32 7.00016100	(2.70476100)	ACCEI	±2.00 (3
	Time 2.52	6 (1,603)	Data	1.822 (0.933)	Loss 2.7658e+00	(2.7842e+00)	Acc@1	39.00 (3
8.47) Acc@5 64.20 (· (1.005)	Ducu	1.022 (0.555)	1000 2.70000100	(2.70120100)	110061	55.00 (5
11.7, 110000 01.20 (,							

	2.516 (1.603)	Data 1.805 (0.933)	Loss 2.5110e+00 (2.7831e+00)	Acc@1 43.20 (3
8.49) Acc@5 69.20 (64.75)		- 1 Too (o oo)	- 0.0070 .00 40 7005 .00	- 01 40 00 4 0
Epoch: [1][2400/2563] Time 8.50) Acc@5 63.60 (64.77)	2.381 (1.603)	Data 1.703 (0.933)	Loss 2.8270e+00 (2.7825e+00)	Acc@1 40.00 (3
,	2.775 (1.603)	Data 2.075 (0.933)	Loss 2.4689e+00 (2.7814e+00)	Acc@1 43.60 (3
8.52) Acc@5 70.00 (64.79)	,	200,3 (0.300)	1000 1110000 (1170110.00)	1100(1 10100 (0
,	2.724 (1.603)	Data 2.013 (0.933)	Loss 2.5419e+00 (2.7806e+00)	Acc@1 42.00 (3
8.53) Acc@5 70.80 (64.80)				
	2.772 (1.604)	Data 2.044 (0.933)	Loss 2.5659e+00 (2.7796e+00)	Acc@1 43.20 (3
8.55) Acc@5 67.40 (64.82)				<u>.</u>
	2.427 (1.604)	Data 1.765 (0.933)	Loss 2.5278e+00 (2.7786e+00)	Acc@1 43.40 (3
8.56) Acc@5 70.00 (64.84)		D-1- 1 072 / 0 022\	T 2 4110-100 (2 7777-100)	301 47 20 (2
Epoch: [1][2450/2563] Time 8.59) Acc@5 71.20 (64.86)	2.597 (1.604)	Data 1.872 (0.933)	Loss 2.4110e+00 (2.7777e+00)	Acc@1 47.20 (3
,	2.640 (1.604)	Data 1.916 (0.933)	Loss 2.5104e+00 (2.7768e+00)	Acc@1 43.20 (3
8.60) Acc@5 68.80 (64.87)		Data 1.510 (0.555)	1033 2.31040.00 (2.77000.00)	10001 43.20 (3
,	2.617 (1.604)	Data 1.895 (0.933)	Loss 2.6178e+00 (2.7759e+00)	Acc@1 42.40 (3
8.62) Acc@5 68.00 (64.89)		,	,	•
Epoch: [1][2480/2563] Time	2.677 (1.604)	Data 1.950 (0.933)	Loss 2.5048e+00 (2.7750e+00)	Acc@1 40.60 (3
8.64) Acc@5 69.40 (64.90)				
	2.513 (1.604)	Data 1.795 (0.933)	Loss 2.5673e+00 (2.7741e+00)	Acc@1 43.20 (3
8.65) Acc@5 69.20 (64.92)				
	2.574 (1.604)	Data 1.869 (0.933)	Loss 2.7587e+00 (2.7733e+00)	Acc@1 39.60 (3
8.67) Acc@5 64.60 (64.93)		Dotto 1 052 / 0 022\	Taga 2 (452a100 (2 7726a100)	701 44 00 (2
Epoch: [1][2510/2563] Time 8.68) Acc@5 69.00 (64.95)	2.517 (1.604)	Data 1.853 (0.933)	Loss 2.6452e+00 (2.7726e+00)	Acc@1 44.00 (3
,	2.428 (1.603)	Data 1.756 (0.932)	Loss 2.6210e+00 (2.7716e+00)	Acc@1 41.00 (3
8.70) Acc@5 65.40 (64.96)		Data 1.730 (0.332)	1055 2.02100.00 (2.77100.00)	110001 11:00 (3
,	2.487 (1.603)	Data 1.778 (0.932)	Loss 2.6311e+00 (2.7711e+00)	Acc@1 40.00 (3
8.71) Acc@5 68.40 (64.97)		,	,	`
Epoch: [1][2540/2563] Time	2.455 (1.603)	Data 1.789 (0.932)	Loss 2.4217e+00 (2.7700e+00)	Acc@1 43.60 (3
8.73) Acc@5 73.00 (64.99)				
Epoch: [1][2550/2563] Time		Data 1.737 (0.932)	Loss 2.4968e+00 (2.7690e+00)	Acc@1 42.00 (3
8.74) Acc@5 70.00 (65.01)				
Epoch: [1][2560/2563] Time		Data 1.819 (0.932)	Loss 2.5480e+00 (2.7681e+00)	Acc@1 42.80 (3
8.76) Acc@5 70.60 (65.03) Test: [0/100] Time 4.330 (2.1737e+00 (2.1737e+00)	Acc@1 52.40 (52.40) Acc@5	77 00 (77 00)
Test: [10/100] Time 4.330 (•	2.1/3/e+00 (2.1/3/e+00) 2.2649e+00 (2.6023e+00)	,	77.00 (77.00) 73.00 (68.35)
Test: [20/100] Time 2.814 (•	2.8596e+00 (2.6530e+00)	Accel 30.00 (45.71) Acces Accel 28.20 (39.93) Acces	60.20 (67.29)
Test: [30/100] Time 2.884 (•	2.2167e+00 (2.5915e+00)	Acc@1 46.20 (39.62) Acc@5	73.80 (68.55)
Test: [40/100] Time 2.654 (•	2.8088e+00 (2.6115e+00)	Acc@1 36.40 (39.54) Acc@5	64.40 (68.16)
Test: [50/100] Time 2.757 (•	3.5327e+00 (2.7415e+00)	Acc@1 25.20 (37.62) Acc@5	48.80 (65.88)
Test: [60/100] Time 2.744 (1.742) Loss	2.9725e+00 (2.7934e+00)	Acc@1 40.20 (37.20) Acc@5	59.60 (64.73)
Test: [70/100] Time 2.839 (•	3.5670e+00 (2.8491e+00)	Acc@1 23.60 (36.54) Acc@5	53.40 (63.78)
Test: [80/100] Time 2.913 (•	2.8902e+00 (2.9103e+00)	Acc@1 39.80 (35.98) Acc@5	58.80 (62.63)
Test: [90/100] Time 2.933 (1.715) Loss	3.4774e+00 (2.9609e+00)	Acc@1 28.20 (35.24) Acc@5	52.60 (61.65)
* Acc@1 35.722 Acc@5 62.130				
lr: 0.0				

%load_ext tensorboard
%tensorboard --logdir=runs

Index of /

Name	Size	Date Modified
.vol/		1/1/20, 12:00:00 AM
Applications/		10/28/21, 12:44:07 AM
bin/		1/1/20, 12:00:00 AM
cores/		6/5/20, 4:55:45 PM
dev/		10/30/21, 11:18:08 AM
etc/		10/15/21, 12:23:15 PM
home/		10/30/21, 11:24:08 PM
Library/		10/15/21, 12:22:52 PM
opt/		2/21/21, 9:52:50 PM
private/		1/1/20, 12:00:00 AM
sbin/		1/1/20, 12:00:00 AM
System/		1/1/20, 12:00:00 AM
tmp/		10/31/21, 4:35:04 AM
Users/		10/15/21, 11:19:49 AM
usr/		1/1/20, 12:00:00 AM
var/		10/15/21, 11:19:51 AM
Volumes/		10/30/21, 11:18:19 AM
.file	0 B	1/1/20, 12:00:00 AM
.VolumeIcon.icns	0 B	

In []:		