```
E:\miniconda3\envs\pytorch\python.exe E:\desktop\DeepLearning\cat_vs_dog\resnet18_CBAM.py
Epoch 1/20
----------
Training: 100%|██████████| 547/547 [00:55<00:00,  9.85it/s]
Train Loss: 0.2255 Acc: 0.8974
Validating: 100%|██████████| 157/157 [00:20<00:00,  7.48it/s]
Val Loss: 0.1645 Acc: 0.9302
Training:   0%|          | 0/547 [00:00<?, ?it/s]
Epoch 2/20
----------
Training: 100%|██████████| 547/547 [01:07<00:00,  8.10it/s]
Validating:   0%|          | 0/157 [00:00<?, ?it/s]
Train Loss: 0.2168 Acc: 0.9032
Validating: 100%|██████████| 157/157 [00:22<00:00,  7.05it/s]
Val Loss: 0.1731 Acc: 0.9272
Epoch 3/20
----------
Training: 100%|██████████| 547/547 [01:13<00:00,  7.46it/s]
Train Loss: 0.2126 Acc: 0.9047
Validating: 100%|██████████| 157/157 [00:22<00:00,  7.07it/s]
Training:   0%|          | 0/547 [00:00<?, ?it/s]Val Loss: 0.1852 Acc: 0.9246
Epoch 4/20
----------
Training: 100%|██████████| 547/547 [01:14<00:00,  7.36it/s]
Validating:   0%|          | 0/157 [00:00<?, ?it/s]
Train Loss: 0.2061 Acc: 0.9087
Validating: 100%|██████████| 157/157 [00:23<00:00,  6.78it/s]
Val Loss: 0.1421 Acc: 0.9412
Epoch 5/20
----------
Training: 100%|██████████| 547/547 [01:14<00:00,  7.
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```
28 38it/s]
29 Train Loss: 0.2107 Acc: 0.9073
30 Validating: 100%|██████████| 157/157 [00:26<00:00,  5
   .98it/s]
31 Training:   0%|          | 0/547 [00:00<?, ?it/s]Val
   Loss: 0.1434 Acc: 0.9396
32 Epoch 6/20
33 ----------
34 Training: 100%|██████████| 547/547 [01:17<00:00,  7.
   06it/s]
35 Train Loss: 0.2057 Acc: 0.9073
36 Validating: 100%|██████████| 157/157 [00:22<00:00,  6
   .94it/s]
37 Training:   0%|          | 0/547 [00:00<?, ?it/s]Val
   Loss: 0.1585 Acc: 0.9360
38 Epoch 7/20
39 ----------
40 Training: 100%|██████████| 547/547 [01:15<00:00,  7.
   27it/s]
41 Validating:   0%|          | 0/157 [00:00<?, ?it/s]
   Train Loss: 0.2052 Acc: 0.9059
42 Validating: 100%|██████████| 157/157 [00:22<00:00,  6
   .89it/s]
43 Val Loss: 0.1392 Acc: 0.9452
44 Training:   0%|          | 0/547 [00:00<?, ?it/s]
   Epoch 8/20
45 ----------
46 Training: 100%|██████████| 547/547 [01:14<00:00,  7.
   34it/s]
47 Train Loss: 0.2010 Acc: 0.9128
48 Validating: 100%|██████████| 157/157 [00:23<00:00,  6
   .70it/s]
49 Training:   0%|          | 0/547 [00:00<?, ?it/s]Val
   Loss: 0.1494 Acc: 0.9358
50 Epoch 9/20
51 ----------
52 Training: 100%|██████████| 547/547 [01:16<00:00,  7.
   15it/s]
53 Train Loss: 0.1993 Acc: 0.9114
54 Validating: 100%|██████████| 157/157 [00:23<00:00,  6
   .73it/s]
```

```
55 Training:   0%|          | 0/547 [00:00<?, ?it/s]Val
   Loss: 0.1868 Acc: 0.9336
56 Epoch 10/20
57 ----------
58 Training: 100%|██████████| 547/547 [01:16<00:00,  7.
   16it/s]
59 Train Loss: 0.2031 Acc: 0.9068
60 Validating: 100%|██████████| 157/157 [00:24<00:00,  6
   .50it/s]
61 Val Loss: 0.1450 Acc: 0.9394
62 Epoch 11/20
63 ----------
64 Training: 100%|██████████| 547/547 [01:15<00:00,  7.
   22it/s]
65 Validating:   0%|          | 0/157 [00:00<?, ?it/s]
   Train Loss: 0.1971 Acc: 0.9115
66 Validating: 100%|██████████| 157/157 [00:22<00:00,  6
   .90it/s]
67 Val Loss: 0.1424 Acc: 0.9440
68 Epoch 12/20
69 ----------
70 Training: 100%|██████████| 547/547 [01:14<00:00,  7.
   33it/s]
71 Validating:   0%|          | 0/157 [00:00<?, ?it/s]
   Train Loss: 0.1701 Acc: 0.9220
72 Validating: 100%|██████████| 157/157 [00:23<00:00,  6
   .72it/s]
73 Val Loss: 0.1242 Acc: 0.9492
74 Training:   0%|          | 0/547 [00:00<?, ?it/s]
   Epoch 13/20
75 ----------
76 Training: 100%|██████████| 547/547 [01:15<00:00,  7.
   25it/s]
77 Validating:   0%|          | 0/157 [00:00<?, ?it/s]
   Train Loss: 0.1609 Acc: 0.9293
78 Validating: 100%|██████████| 157/157 [00:23<00:00,  6
   .63it/s]
79 Val Loss: 0.1210 Acc: 0.9502
80 Epoch 14/20
81 ----------
82 Training: 100%|██████████| 547/547 [01:16<00:00,  7.
```

```
 82 11it/s]
 83 Validating:   0%|          | 0/157 [00:00<?, ?it/s]
    Train Loss: 0.1548 Acc: 0.9324
 84 Validating: 100%|██████████| 157/157 [00:22<00:00,
    7.05it/s]
 85 Val Loss: 0.1148 Acc: 0.9538
 86 Epoch 15/20
 87 ----------
 88 Training: 100%|██████████| 547/547 [01:14<00:00,  7.
    35it/s]
 89 Train Loss: 0.1498 Acc: 0.9365
 90 Validating: 100%|██████████| 157/157 [00:22<00:00,
    6.97it/s]
 91 Val Loss: 0.1170 Acc: 0.9530
 92 Epoch 16/20
 93 ----------
 94 Training: 100%|██████████| 547/547 [01:15<00:00,  7.
    25it/s]
 95 Train Loss: 0.1503 Acc: 0.9347
 96 Validating: 100%|██████████| 157/157 [00:25<00:00,
    6.11it/s]
 97 Val Loss: 0.1147 Acc: 0.9532
 98 Epoch 17/20
 99 ----------
100 Training: 100%|██████████| 547/547 [01:18<00:00,  7.
    01it/s]
101 Validating:   0%|          | 0/157 [00:00<?, ?it/s]
    Train Loss: 0.1497 Acc: 0.9342
102 Validating: 100%|██████████| 157/157 [00:22<00:00,
    7.01it/s]
103 Training:   0%|          | 0/547 [00:00<?, ?it/s]Val
     Loss: 0.1154 Acc: 0.9538
104 Epoch 18/20
105 ----------
106 Training: 100%|██████████| 547/547 [01:15<00:00,  7.
    21it/s]
107 Train Loss: 0.1502 Acc: 0.9338
108 Validating: 100%|██████████| 157/157 [00:22<00:00,
    7.07it/s]
109 Val Loss: 0.1159 Acc: 0.9546
110 Training:   0%|          | 0/547 [00:00<?, ?it/s]
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Epoch 19/20
----------
Training: 100%|██████████| 547/547 [01:15<00:00,  7.25it/s]
Validating:   0%|          | 0/157 [00:00<?, ?it/s]
Train Loss: 0.1486 Acc: 0.9365
Validating: 100%|██████████| 157/157 [00:22<00:00, 7.04it/s]
Training:   0%|          | 0/547 [00:00<?, ?it/s]Val Loss: 0.1110 Acc: 0.9544
Epoch 20/20
----------
Training: 100%|██████████| 547/547 [01:14<00:00,  7.32it/s]
Validating:   0%|          | 0/157 [00:00<?, ?it/s]
Train Loss: 0.1487 Acc: 0.9365
Validating: 100%|██████████| 157/157 [00:23<00:00, 6.75it/s]
Val Loss: 0.1120 Acc: 0.9548
Traceback (most recent call last):
  File "E:\desktop\DeepLearning\cat_vs_dog\resnet18_CBAM.py", line 359, in <module>
    model = train_model(model, criterion, optimizer, num_epochs=20)
  File "E:\desktop\DeepLearning\cat_vs_dog\resnet18_CBAM.py", line 323, in train_model
    plt.plot(train_accs, label='Train Acc')
  File "E:\miniconda3\envs\pytorch\Lib\site-packages\matplotlib\pyplot.py", line 3794, in plot
    return gca().plot(
  File "E:\miniconda3\envs\pytorch\Lib\site-packages\matplotlib\axes\_axes.py", line 1779, in plot
    lines = [*self._get_lines(self, *args, data=data, **kwargs)]
  File "E:\miniconda3\envs\pytorch\Lib\site-packages\matplotlib\axes\_base.py", line 296, in __call__
    yield from self._plot_args(
  File "E:\miniconda3\envs\pytorch\Lib\site-packages\matplotlib\axes\_base.py", line 478, in _plot_args
    x, y = index_of(xy[-1])
  File "E:\miniconda3\envs\pytorch\Lib\site-packages
```

```
\matplotlib\cbook.py", line 1719, in index_of
    y = _check_1d(y)
  File "E:\miniconda3\envs\pytorch\Lib\site-packages
\matplotlib\cbook.py", line 1411, in _check_1d
    return np.atleast_1d(x)
  File "E:\miniconda3\envs\pytorch\Lib\site-packages
\numpy\core\shape_base.py", line 65, in atleast_1d
    ary = asanyarray(ary)
  File "E:\miniconda3\envs\pytorch\Lib\site-packages
\torch\_tensor.py", line 1225, in __array__
    return self.numpy()
TypeError: can't convert cuda:0 device type tensor
to numpy. Use Tensor.cpu() to copy the tensor to
host memory first.

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