```
E:\miniconda3\envs\pytorch\python.exe E:\desktop\DeepLearning\cat_vs_dog\resnet18_CBAM.py
Training:   0%|          | 0/547 [00:00<?, ?it/s]
Epoch 1/20
----------
Training: 100%|██████████| 547/547 [00:58<00:00,  9.33it/s]
Validating:   0%|          | 0/157 [00:00<?, ?it/s]
Train Loss: 0.6428 Acc: 0.6328
Validating: 100%|██████████| 157/157 [00:31<00:00,  4.95it/s]
Val Loss: 0.6707 Acc: 0.5898
Epoch 2/20
----------
Training: 100%|██████████| 547/547 [00:59<00:00,  9.13it/s]
Validating:   0%|          | 0/157 [00:00<?, ?it/s]
Train Loss: 0.6279 Acc: 0.6539
Validating: 100%|██████████| 157/157 [00:23<00:00,  6.76it/s]
Val Loss: 0.6473 Acc: 0.6282
Training:   0%|          | 0/547 [00:00<?, ?it/s]
Epoch 3/20
----------
Training: 100%|██████████| 547/547 [01:00<00:00,  9.10it/s]
Validating:   0%|          | 0/157 [00:00<?, ?it/s]
Train Loss: 0.6071 Acc: 0.6767
Validating: 100%|██████████| 157/157 [00:22<00:00,  6.94it/s]
Val Loss: 0.5778 Acc: 0.6846
Epoch 4/20
----------
Training: 100%|██████████| 547/547 [01:00<00:00,  9.06it/s]
Validating:   0%|          | 0/157 [00:00<?, ?it/s]
Train Loss: 0.5841 Acc: 0.6965
Validating: 100%|██████████| 157/157 [00:22<00:00,  6.93it/s]
Val Loss: 0.5220 Acc: 0.7512
Epoch 5/20
```

```
27 ----------
28 Training: 100%|██████████| 547/547 [01:00<00:00,  9.
   06it/s]
29 Validating:   0%|          | 0/157 [00:00<?, ?it/s]
   Train Loss: 0.5659 Acc: 0.7119
30 Validating: 100%|██████████| 157/157 [00:22<00:00,  7
   .00it/s]
31 Training:   0%|          | 0/547 [00:00<?, ?it/s]Val
   Loss: 0.5429 Acc: 0.7272
32 Epoch 6/20
33 ----------
34 Training: 100%|██████████| 547/547 [01:00<00:00,  9.
   01it/s]
35 Validating:   0%|          | 0/157 [00:00<?, ?it/s]
   Train Loss: 0.5470 Acc: 0.7259
36 Validating: 100%|██████████| 157/157 [00:25<00:00,  6
   .05it/s]
37 Training:   0%|          | 0/547 [00:00<?, ?it/s]Val
   Loss: 0.5395 Acc: 0.7450
38 Epoch 7/20
39 ----------
40 Training: 100%|██████████| 547/547 [01:03<00:00,  8.
   65it/s]
41 Train Loss: 0.5322 Acc: 0.7317
42 Validating: 100%|██████████| 157/157 [00:23<00:00,  6
   .76it/s]
43 Val Loss: 0.4502 Acc: 0.7914
44 Training:   0%|          | 0/547 [00:00<?, ?it/s]
   Epoch 8/20
45 ----------
46 Training: 100%|██████████| 547/547 [01:11<00:00,  7.
   64it/s]
47 Validating:   0%|          | 0/157 [00:00<?, ?it/s]
   Train Loss: 0.5033 Acc: 0.7525
48 Validating: 100%|██████████| 157/157 [00:21<00:00,  7
   .14it/s]
49 Val Loss: 0.4211 Acc: 0.8048
50 Epoch 9/20
51 ----------
52 Training: 100%|██████████| 547/547 [01:11<00:00,  7.
   61it/s]
```

```
Train Loss: 0.4837 Acc: 0.7647
Validating: 100%|██████████| 157/157 [00:22<00:00,  7.08it/s]
Val Loss: 0.3866 Acc: 0.8228
Training:   0%|          | 0/547 [00:00<?, ?it/s]
Epoch 10/20
----------
Training: 100%|██████████| 547/547 [01:12<00:00,  7.52it/s]
Train Loss: 0.4564 Acc: 0.7845
Validating: 100%|██████████| 157/157 [00:24<00:00,  6.50it/s]
Val Loss: 0.3609 Acc: 0.8360
Epoch 11/20
----------
Training: 100%|██████████| 547/547 [01:14<00:00,  7.33it/s]
Validating:   0%|          | 0/157 [00:00<?, ?it/s]
Train Loss: 0.4329 Acc: 0.7943
Validating: 100%|██████████| 157/157 [00:24<00:00,  6.52it/s]
Val Loss: 0.3648 Acc: 0.8266
Epoch 12/20
----------
Training: 100%|██████████| 547/547 [01:14<00:00,  7.36it/s]
Validating:   0%|          | 0/157 [00:00<?, ?it/s]
Train Loss: 0.4229 Acc: 0.8046
Validating: 100%|██████████| 157/157 [00:24<00:00,  6.43it/s]
Val Loss: 0.3319 Acc: 0.8454
Epoch 13/20
----------
Training: 100%|██████████| 547/547 [01:13<00:00,  7.40it/s]
Validating:   0%|          | 0/157 [00:00<?, ?it/s]
Train Loss: 0.3991 Acc: 0.8142
Validating: 100%|██████████| 157/157 [00:23<00:00,  6.61it/s]
Val Loss: 0.2987 Acc: 0.8696
Training:   0%|          | 0/547 [00:00<?, ?it/s]
```

```
Epoch 14/20
----------
Training: 100%|██████████| 547/547 [01:14<00:00,  7.35it/s]
Validating:   0%|          | 0/157 [00:00<?, ?it/s]
Train Loss: 0.3885 Acc: 0.8187
Validating: 100%|██████████| 157/157 [00:24<00:00, 6.53it/s]
Val Loss: 0.2935 Acc: 0.8714
Epoch 15/20
----------
Training: 100%|██████████| 547/547 [01:15<00:00,  7.28it/s]
Train Loss: 0.3686 Acc: 0.8284
Validating: 100%|██████████| 157/157 [00:24<00:00, 6.32it/s]
Val Loss: 0.2508 Acc: 0.8866
Epoch 16/20
----------
Training: 100%|██████████| 547/547 [01:14<00:00,  7.36it/s]
Validating:   0%|          | 0/157 [00:00<?, ?it/s]
Train Loss: 0.3475 Acc: 0.8403
Validating: 100%|██████████| 157/157 [00:24<00:00, 6.33it/s]
Training:   0%|          | 0/547 [00:00<?, ?it/s]Val Loss: 0.3092 Acc: 0.8604
Epoch 17/20
----------
Training: 100%|██████████| 547/547 [01:14<00:00,  7.30it/s]
Validating:   0%|          | 0/157 [00:00<?, ?it/s]
Train Loss: 0.3459 Acc: 0.8402
Validating: 100%|██████████| 157/157 [00:23<00:00, 6.59it/s]
Val Loss: 0.2659 Acc: 0.8786
Epoch 18/20
----------
Training: 100%|██████████| 547/547 [01:16<00:00,  7.17it/s]
Train Loss: 0.3354 Acc: 0.8443
```

```
108 Validating: 100%|██████████| 157/157 [00:21<00:00,
    7.14it/s]
109 Val Loss: 0.2442 Acc: 0.8892
110 Epoch 19/20
111 ----------
112 Training: 100%|██████████| 547/547 [01:12<00:00,  7.
    58it/s]
113 Validating:   0%|          | 0/157 [00:00<?, ?it/s]
    Train Loss: 0.3244 Acc: 0.8487
114 Validating: 100%|██████████| 157/157 [00:22<00:00,
    7.03it/s]
115 Training:   0%|          | 0/547 [00:00<?, ?it/s]Val
     Loss: 0.2590 Acc: 0.8840
116 Epoch 20/20
117 ----------
118 Training: 100%|██████████| 547/547 [01:13<00:00,  7.
    43it/s]
119 Train Loss: 0.3170 Acc: 0.8560
120 Validating: 100%|██████████| 157/157 [00:22<00:00,
    7.00it/s]
121 Val Loss: 0.2224 Acc: 0.9016
122 Traceback (most recent call last):
123   File "E:\desktop\DeepLearning\cat_vs_dog\
    resnet18_CBAM.py", line 359, in <module>
124     model = train_model(model, criterion, optimizer
    , num_epochs=20)
125   File "E:\desktop\DeepLearning\cat_vs_dog\
    resnet18_CBAM.py", line 323, in train_model
126     plt.plot(train_accs, label='Train Acc')
127   File "E:\miniconda3\envs\pytorch\Lib\site-packages
    \matplotlib\pyplot.py", line 3794, in plot
128     return gca().plot(
129   File "E:\miniconda3\envs\pytorch\Lib\site-packages
    \matplotlib\axes\_axes.py", line 1779, in plot
130     lines = [*self._get_lines(self, *args, data=data
    , **kwargs)]
131   File "E:\miniconda3\envs\pytorch\Lib\site-packages
    \matplotlib\axes\_base.py", line 296, in __call__
132     yield from self._plot_args(
133   File "E:\miniconda3\envs\pytorch\Lib\site-packages
    \matplotlib\axes\_base.py", line 478, in _plot_args
```

```
134     x, y = index_of(xy[-1])
135   File "E:\miniconda3\envs\pytorch\Lib\site-packages
    \matplotlib\cbook.py", line 1719, in index_of
136     y = _check_1d(y)
137   File "E:\miniconda3\envs\pytorch\Lib\site-packages
    \matplotlib\cbook.py", line 1411, in _check_1d
138     return np.atleast_1d(x)
139   File "E:\miniconda3\envs\pytorch\Lib\site-packages
    \numpy\core\shape_base.py", line 65, in atleast_1d
140     ary = asanyarray(ary)
141   File "E:\miniconda3\envs\pytorch\Lib\site-packages
    \torch\_tensor.py", line 1225, in __array__
142     return self.numpy()
143 TypeError: can't convert cuda:0 device type tensor
    to numpy. Use Tensor.cpu() to copy the tensor to
    host memory first.
144
145 □□□□□□□□□□□□ 1
146
```