```
1 E:\miniconda3\envs\pytorch\python.exe E:\desktop\
  DeepLearning\cat_vs_dog\resnet18_CBAM.py
2 Epoch 1/20
3 -----
4 Training: 100% | 547/547 [00:57<00:00, 9.
  45it/s]
5 Validating: 0%|
                          | 0/157 [00:00<?, ?it/s]
  Train Loss: 0.3090 Acc: 0.8610
6 Validating: 100%| | 157/157 [00:21<00:00, 7
  .45it/s]
7 Val Loss: 0.2120 Acc: 0.9084
8 Training: 0% | 0/547 [00:00<?, ?it/s]
  Epoch 2/20
9 -----
10 Training: 100%| 547/547 [00:56<00:00, 9.
  62it/sl
11 Train Loss: 0.3013 Acc: 0.8647
12 Validating: 100%| | 157/157 [00:21<00:00, 7
  .43it/s]
13 Val Loss: 0.2124 Acc: 0.8998
14 Epoch 3/20
15 -----
16 Training: 100% | 547/547 [00:56<00:00, 9.
  67it/s]
17 Train Loss: 0.2960 Acc: 0.8665
18 Validating: 100%| | 157/157 [00:20<00:00, 7
  .51it/sl
19 Val Loss: 0.1967 Acc: 0.9150
20 Epoch 4/20
21 -----
22 Training: 100%| 547/547 [00:56<00:00, 9.
  68it/s]
23 Validating: 0%|
                          | 0/157 [00:00<?, ?it/s]
  Train Loss: 0.2953 Acc: 0.8643
24 Validating: 100% | 157/157 [00:22<00:00, 7
  .05it/s
25 Training: 0% | | 0/547 [00:00<?, ?it/s] Val
  Loss: 0.2150 Acc: 0.9070
26 Epoch 5/20
27 -----
28 Training: 100% | 547/547 [00:57<00:00,
```

```
28 50it/s]
29 Validating: 0% | | 0/157 [00:00<?, ?it/s]
  Train Loss: 0.2780 Acc: 0.8736
30 Validating: 100%| | 157/157 [00:22<00:00, 6
  .87it/s]
31 Val Loss: 0.2033 Acc: 0.9156
32 Epoch 6/20
33 -----
34 Training: 100% | 547/547 [00:57<00:00, 9.
  49it/s]
35 Validating: 0%
                          | 0/157 [00:00<?, ?it/s]
  Train Loss: 0.2736 Acc: 0.8765
36 Validating: 100%| 157/157 [00:22<00:00, 6
  .88it/s]
37 Training: 0% | 0/547 [00:00<?, ?it/s] Val
  Loss: 0.2140 Acc: 0.9064
38 Epoch 7/20
39 -----
40 Training: 100%| 547/547 [00:57<00:00, 9.
  53it/sl
41 Validating: 0%|
                          | 0/157 [00:00<?, ?it/s]
  Train Loss: 0.2671 Acc: 0.8769
42 Validating: 100%| 157/157 [00:21<00:00, 7
  .19it/s]
43 Val Loss: 0.1912 Acc: 0.9178
44 Training: 0%| | 0/547 [00:00<?, ?it/s]
  Epoch 8/20
45 -----
46 Training: 100% | 547/547 [00:57<00:00, 9.
  57it/sl
47 Train Loss: 0.2699 Acc: 0.8791
48 Validating: 100%| | 157/157 [00:21<00:00, 7
  .31it/s]
49 Val Loss: 0.1945 Acc: 0.9156
50 Epoch 9/20
51 -----
52 Training: 100%| 547/547 [00:56<00:00, 9.
  62it/s]
53 Validating: 0%
                          | 0/157 [00:00<?, ?it/s]
  Train Loss: 0.2592 Acc: 0.8849
54 Validating: 100% | 157/157 [00:21<00:00, 7
```

```
54 .45it/s]
55 Val Loss: 0.1749 Acc: 0.9222
56 Training:
            0%|
                      | 0/547 [00:00<?, ?it/s]
  Epoch 10/20
57 -----
58 Training: 100% | 547/547 [00:56<00:00, 9.
  64it/sl
59 Validating:
               0%|
                           | 0/157 [00:00<?, ?it/s]
  Train Loss: 0.2522 Acc: 0.8898
60 Validating: 100%| | 157/157 [00:21<00:00, 7
  .42it/sl
61 Val Loss: 0.1657 Acc: 0.9270
62 Epoch 11/20
63 -----
64 Training: 100%| 547/547 [00:57<00:00, 9.
  59it/sl
65 Validating:
               0%|
                           | 0/157 [00:00<?, ?it/s]
  Train Loss: 0.2463 Acc: 0.8894
66 Validating: 100% | 157/157 [00:21<00:00,
  .37it/sl
67 Val Loss: 0.1797 Acc: 0.9256
68 Epoch 12/20
69 -----
70 Training: 100%| 547/547 [00:56<00:00, 9.
  63it/s]
71 Validating: 0%
                           | 0/157 [00:00<?, ?it/s]
  Train Loss: 0.2523 Acc: 0.8864
72 Validating: 100% | 157/157 [00:22<00:00, 6
  .96it/s]
73 Val Loss: 0.1748 Acc: 0.9272
74 Training: 0%|
                  | 0/547 [00:00<?, ?it/s]
  Epoch 13/20
75 -----
76 Training: 100% | 547/547 [00:57<00:00, 9.
  53it/sl
77 Validating: 0%| | 0/157 [00:00<?, ?it/s]
  Train Loss: 0.2426 Acc: 0.8933
78 Validating: 100%| | 157/157 [00:21<00:00, 7
  .22it/sl
79 Val Loss: 0.1775 Acc: 0.9226
80 Epoch 14/20
```

```
81 ----
82 Training: 100% | 547/547 [00:57<00:00, 9.
   51it/s]
83 Train Loss: 0.2391 Acc: 0.8914
84 Validating: 100% | | 157/157 [00:22<00:00,
   7.00it/sl
85 Val Loss: 0.1625 Acc: 0.9290
86 Training: 0% | 0/547 [00:00<?, ?it/s]
   Epoch 15/20
87 -----
88 Training: 100% | 547/547 [00:56<00:00, 9.
   60it/s]
89 Validating: 0%
                           | 0/157 [00:00<?, ?it/s]
   Train Loss: 0.2340 Acc: 0.8927
90 Validating: 100%| | 157/157 [00:20<00:00,
   7.61it/sl
91 Val Loss: 0.1585 Acc: 0.9292
92 Training: 0%| | 0/547 [00:00<?, ?it/s]
   Epoch 16/20
93 -----
94 Training: 100% | 547/547 [00:56<00:00, 9.
   61it/s]
95 Validating: 0%|
                          | 0/157 [00:00<?, ?it/s]
   Train Loss: 0.2367 Acc: 0.8931
96 Validating: 100%| | 157/157 [00:21<00:00,
   7.29it/s]
97 Training: 0%| | 0/547 [00:00<?, ?it/s]Val
   Loss: 0.1655 Acc: 0.9272
98 Epoch 17/20
99 -----
100 Training: 100% | 547/547 [00:56<00:00, 9.
   63it/sl
               0%|
101 Validating:
                           | 0/157 [00:00<?, ?it/s]
   Train Loss: 0.2323 Acc: 0.8985
102 Validating: 100% | 157/157 [00:21<00:00,
   7.15it/sl
103 Training: 0%| | 0/547 [00:00<?, ?it/s]Val
   Loss: 0.1994 Acc: 0.9096
104 Epoch 18/20
105 -----
106 Training: 100% | 547/547 [00:57<00:00, 9.
```

```
106 51it/s]
107 Train Loss: 0.2242 Acc: 0.8983
108 Validating: 100%
                             || 157/157 [00:21<00:00,
   7.17it/s]
                           | 0/547 [00:00<?, ?it/s]Val
109 Training:
               0%|
    Loss: 0.1902 Acc: 0.9176
110 Epoch 19/20
111 -----
                           | 547/547 [00:57<00:00, 9.
112 Training: 100%
   51it/s]
113 Validating:
                 0%|
                              | 0/157 [00:00<?, ?it/s]
   Train Loss: 0.2178 Acc: 0.8999
114 Validating: 100%
   6.90it/s]
115 Val Loss: 0.1612 Acc: 0.9366
116 Training:
               0%|
                            | 0/547 [00:00<?, ?it/s]
   Epoch 20/20
117 -----
118 Training: 100% | 547/547 [00:57<00:00, 9.
   59it/sl
119 Validating:
                 0%|
                              | 0/157 [00:00<?, ?it/s]
   Train Loss: 0.1940 Acc: 0.9129
120 Validating: 100%
                             | 157/157 [00:21<00:00,
   7.41it/s]
121 Val Loss: 0.1372 Acc: 0.9424
122 Traceback (most recent call last):
     File "E:\desktop\DeepLearning\cat_vs_dog\
123
   resnet18_CBAM.py", line 359, in <module>
124
       model = train_model(model, criterion, optimizer
    , num_epochs=20)
     File "E:\desktop\DeepLearning\cat_vs_dog\
125
   resnet18_CBAM.py", line 323, in train_model
       plt.plot(train_accs, label='Train Acc')
126
     File "E:\miniconda3\envs\pytorch\Lib\site-packages
127
   \matplotlib\pyplot.py", line 3794, in plot
128
       return qca().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
```

```
□□ - resnet18 CBAM (1)
131 \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
        return np.atleast_1d(x)
138
      File "E:\miniconda3\envs\pytorch\Lib\site-packages
139
    \numpy\core\shape_base.py", line 65, in atleast_1d
140
        ary = asanyarray(ary)
      File "E:\miniconda3\envs\pytorch\Lib\site-packages
141
    \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 00000000000 1
146
```