```
1 D:\Anaconda\envs\DL\python.exe D:/
  3 Python □□: 3.9.22
4 NumPy 🛛 🖂 : 1.21.6
5 PyTorch □□: 1.12.0+cu113
6 Torchvision 🛛 🖂
7 Matplotlib □□: 3.5.3
9 MKL 0000: 0
10 CUDA 🛛 🖂 : 🔻
11 🛮 🔻 CUDA ឋ 🖂: NVIDIA GeForce RTX 3060 Laptop GPU
12 Epoch 1/30: 100% | 100% | 21/21 [00:09<00:00,
  18batch/s, loss=0.3940, acc=76.07%]
13 000000Epoch 1000000 83.63%
14 Epoch 01 | 0000: 0.5336 | 00000: 76.07% | 00000: 83.
  63%
15 Epoch 2/30: 100% | 21/21 [00:03<00:00, 5.
  42batch/s, loss=0.3599, acc=91.01%]
16 Epoch 3/30: 0%| | 0/21 [00:00<?, ?batch/s]
  0000000Epoch 2000000 91.81%
17 Epoch 02 | 0000: 0.2781 | 00000: 91.01% | 00000: 91.
  81%
18 Epoch 3/30: 100%| 21/21 [00:04<00:00, 4.
  67batch/s, loss=0.1888, acc=94.66%]
19 000000Epoch 3000000 94.74%
20 Epoch 03 | 0000: 0.1487 | 00000: 94.66% | 00000: 94.
  74%
21 Epoch 4/30: 100% | 21/21 [00:04<00:00, 4.
  54batch/s, loss=0.0941, acc=98.17%]
                   | 0/21 [00:00<?, ?batch/s]
22 Epoch 5/30: 0%
  0000000Epoch 4000000 95.32%
23 Epoch 04 | 0000: 0.0742 | 00000: 98.17% | 00000: 95.
  32%
24 Epoch 5/30: 100%| 21/21 [00:04<00:00, 4.
  41batch/s, loss=0.0915, acc=98.32%]
25 Epoch 6/30: 0%| | 0/21 [00:00<?, ?batch/s]
  Epoch 05 | 0000: 0.0581 | 00000: 98.32% | 00000: 94.
  74%
26 Epoch 6/30: 100%| 21/21 [00:03<00:00, 5.
  58batch/s, loss=0.0202, acc=98.48%]
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00-000000
27 Epoch 7/30: 0%| | 0/21 [00:00<?, ?batch/s]
   Epoch 06 | 0000: 0.0465 | 00000: 98.48% | 00000: 95.
   32%
28 Epoch 7/30: 100%| 21/21 [00:03<00:00, 6.
   71batch/s, loss=0.0116, acc=99.39%]
               0% | 0/21 [00:00<?, ?batch/s]
29 Epoch 8/30:
   Epoch 07 | 0000: 0.0286 | 00000: 99.39% | 00000: 95.
   32%
30 Epoch 8/30: 100% | 21/21 [00:02<00:00, 7.
   12batch/s, loss=0.0084, acc=99.70%]
31 Epoch 9/30: 0%| | 0/21 [00:00<?, ?batch/s]
   Epoch 08 | 0000: 0.0190 | 00000: 99.70% | 00000: 95.
   32%
32 Epoch 9/30: 100% | 21/21 [00:03<00:00, 6.
  62batch/s, loss=0.0032, acc=100.00%]
33 Epoch 09 | 0000: 0.0094 | 00000: 100.00% | 00000: 95.
   32%
34 Epoch 10/30: 100%| 21/21 [00:03<00:00, 6.
   85batch/s, loss=0.0139, acc=99.85%]
35 Epoch 11/30: 0%| | 0/21 [00:00<?, ?batch/s
   ]Epoch 10 | 0000: 0.0146 | 00000: 99.85% | 00000: 95.
   32%
36 Epoch 11/30: 100% | 21/21 [00:02<00:00, 7.
   O5batch/s, loss=0.0052, acc=99.70%]
37 Epoch 11 | 0000: 0.0128 | 00000: 99.70% | 00000: 94.
   74%
38 Epoch 12/30: 100% | 21/21 [00:03<00:00, 6.
  83batch/s, loss=0.0103, acc=99.70%]
39 Epoch 12 | 0000: 0.0179 | 00000: 99.70% | 00000: 95.
   32%
40 Epoch 13/30: 100% | 21/21 [00:02<00:00, 7.
   O1batch/s, loss=0.0083, acc=99.54%]
41 Epoch 13 | 0000: 0.0171 | 00000: 99.54% | 00000: 95.
   32%
42 Epoch 14/30: 100% | 21/21 [00:03<00:00, 6.
   60batch/s, loss=0.2060, acc=99.54%]
43 Epoch 14 | 0000: 0.0145 | 00000: 99.54% | 00000: 95.
   32%
44 Epoch 15/30: 100% 21/21 [00:03<00:00, 6.
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45 Epoch 15 | 0000: 0.0114 | 00000: 99.85% | 00000: 95.

44batch/s, loss=0.0049, acc=99.85%]

32%

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45 32%
46 Epoch 16/30: 100% | 21/21 [00:02<00:00, 7.
  13batch/s, loss=0.0015, acc=99.70%]
47 Epoch 17/30: 0%| | 0/21 [00:00<?, ?batch/s
  ]Epoch 16 | 0000: 0.0104 | 00000: 99.70% | 00000: 95.
  32%
48 Epoch 17/30: 100%| 21/21 [00:03<00:00, 6.
  93batch/s, loss=0.0044, acc=100.00%]
49 Epoch 18/30: 0%| | 0/21 [00:00<?, ?batch/s
  ]Epoch 17 | 0000: 0.0076 | 00000: 100.00% | 00000: 95
  .32%
50 Epoch 18/30: 100% | 21/21 [00:02<00:00, 7.
  O8batch/s, loss=0.0066, acc=100.00%]
51 Epoch 18 | 0000: 0.0088 | 00000: 100.00% | 00000: 95.
  32%
52 Epoch 19/30: 100% | 21/21 [00:02<00:00, 7.
  05batch/s, loss=0.\overline{0097}, acc=99.39\%]
53 Epoch 20/30: 0%| | 0/21 [00:00<?, ?batch/s
  ]Epoch 19 | 0000: 0.0257 | 00000: 99.39% | 00000: 95.
  32%
54 Epoch 20/30: 100% | 21/21 [00:02<00:00, 7.
  14batch/s, loss=0.0115, acc=99.85%]
55 Epoch 20 | 0000: 0.0104 | 00000: 99.85% | 00000: 95.
  32%
56 Epoch 21/30: 100% | 21/21 [00:03<00:00, 6.
  89batch/s, loss=0.0186, acc=100.00%]
57 Epoch 21 | 0000: 0.0096 | 00000: 100.00% | 00000: 95.
  32%
58 Epoch 22/30: 100% | 21/21 [00:03<00:00, 6.
  99batch/s, loss=0.0043, acc=99.70%]
59 Epoch 22 | 0000: 0.0167 | 00000: 99.70% | 00000: 95.
  32%
60 Epoch 23/30: 100% 21/21 [00:03<00:00, 6.
  88batch/s, loss=0.0088, acc=100.00%]
61 Epoch 24/30: 0% | 0/21 [00:00<?, ?batch/s
  ]Epoch 23 | 0000: 0.0103 | 00000: 100.00% | 00000: 95
  .32%
62 Epoch 24/30: 100% | 21/21 [00:03<00:00, 6.
  37batch/s, loss=0.0092, acc=99.85%]
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63 Epoch 24 | 0000: 0.0137 | 00000: 99.85% | 00000: 95.

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64 Epoch 25/30: 100%| 21/21 [00:03<00:00, 6
  .87batch/s, loss=0.0243, acc=99.85%]
65 Epoch 25 | 0000: 0.0108 | 00000: 99.85% | 00000: 95.
  32%
66 Epoch 26/30: 100% | 21/21 [00:03<00:00, 6
  .80batch/s, loss=0.0065, acc=100.00%]
67 Epoch 27/30: 0%| | 0/21 [00:00<?, ?batch/
  s]Epoch 26 | 0000: 0.0067 | 00000: 100.00% | 00000:
  95.32%
68 Epoch 27/30: 100%| | 21/21 [00:03<00:00, 6
  .97batch/s, loss=0.0077, acc=99.85%]
69 Epoch 28/30: 0%| | 0/21 [00:00<?, ?batch/
  s]Epoch 27 | 0000: 0.0105 | 00000: 99.85% | 00000:
  95.32%
70 Epoch 28/30: 100%| 21/21 [00:03<00:00, 6
  .80batch/s, loss=0.0690, acc=99.85%]
71 Epoch 29/30: 0% | 0/21 [00:00<?, ?batch/
  s]Epoch 28 | 0000: 0.0112 | 00000: 99.85% | 00000:
  95.32%
72 Epoch 29/30: 100%| | 21/21 [00:03<00:00, 6
  .89batch/s, loss=0.0036, acc=99.85%]
73 Epoch 29 | 0000: 0.0098 | 00000: 99.85% | 00000: 95.
  32%
74 Epoch 30/30: 100%| | 21/21 [00:03<00:00, 6
  .86batch/s, loss=0.0139, acc=100.00%]
75 Epoch 30 | 0000: 0.0083 | 00000: 100.00% | 00000: 95
  .32%
76
77 00000,00000
78
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