

```
C:\Users\chris\anaconda3\python.exe "C:\Program Files\
JetBrains\PyCharm 2020.3.5\plugins\python\helpers\pydev
\pydevconsole.py" --mode=client --port=51292
```

```
import sys; print('Python %s on %s' % (sys.version, sys
.platform))
sys.path.extend(['C:\\Users\\chris\\PycharmProjects\\
NAI', 'C:/Users/chris/PycharmProjects/NAI'])
```

```
Python 3.8.8 (default, Feb 24 2021, 15:54:32) [MSC v.
1928 64 bit (AMD64)]
```

```
Type 'copyright', 'credits' or 'license' for more
information
```

```
IPython 7.21.0 -- An enhanced Interactive Python. Type
'?' for help.
```

```
PyDev console: using IPython 7.21.0
```

```
Python 3.8.8 (default, Feb 24 2021, 15:54:32) [MSC v.
1928 64 bit (AMD64)] on win32
```

```
In[2]: runfile('C:/Users/chris/PycharmProjects/NAI/LAB5
/neural_network_CIFAR100.py', wdir='C:/Users/chris/
PycharmProjects/NAI/LAB5')
```

```
2021-12-16 22:11:40.437669: W tensorflow/
stream_executor/platform/default/dso_loader.cc:64]
```

```
Could not load dynamic library 'cudart64_110.dll';
```

```
dlerror: cudart64_110.dll not found
```

```
2021-12-16 22:11:40.438480: I tensorflow/
```

```
stream_executor/cuda/cudart_stub.cc:29] Ignore above
cudart dlerror if you do not have a GPU set up on your
machine.
```

```
Iteration 1, loss = 4.20459156
```

```
Iteration 2, loss = 3.79111819
```

```
Iteration 3, loss = 3.62466680
```

```
Iteration 4, loss = 3.51318874
```

```
Iteration 5, loss = 3.43309352
```

```
Iteration 6, loss = 3.37037977
```

```
Iteration 7, loss = 3.30753722
```

```
Iteration 8, loss = 3.26222250
```

```
Iteration 9, loss = 3.21396543
```

```
Iteration 10, loss = 3.17666781
```

```
Iteration 11, loss = 3.14636132
```

```
Iteration 12, loss = 3.11415078
```

Iteration 13, loss = 3.07952608  
Iteration 14, loss = 3.05433854  
Iteration 15, loss = 3.03103272  
Iteration 16, loss = 3.01445505  
Iteration 17, loss = 2.98991347  
Iteration 18, loss = 2.96337454  
Iteration 19, loss = 2.95231880  
Iteration 20, loss = 2.92778077  
Iteration 21, loss = 2.91138200  
Iteration 22, loss = 2.89335087  
Iteration 23, loss = 2.87595248  
Iteration 24, loss = 2.85791816  
Iteration 25, loss = 2.84713613  
Iteration 26, loss = 2.82930874  
Iteration 27, loss = 2.81728960  
Iteration 28, loss = 2.80874509  
Iteration 29, loss = 2.79698649  
Iteration 30, loss = 2.77409628  
Iteration 31, loss = 2.76223179  
Iteration 32, loss = 2.75866846  
Iteration 33, loss = 2.74305287  
Iteration 34, loss = 2.74407740  
Iteration 35, loss = 2.72897524  
Iteration 36, loss = 2.70605144  
Iteration 37, loss = 2.69486948  
Iteration 38, loss = 2.69336251  
Iteration 39, loss = 2.68550696  
Iteration 40, loss = 2.67298647  
Iteration 41, loss = 2.66224672  
Iteration 42, loss = 2.65144943  
Iteration 43, loss = 2.65003078  
Iteration 44, loss = 2.64409650  
Iteration 45, loss = 2.62716349  
Iteration 46, loss = 2.61744785  
Iteration 47, loss = 2.60685938  
Iteration 48, loss = 2.59896217  
Iteration 49, loss = 2.60160398  
Iteration 50, loss = 2.58562346  
Iteration 51, loss = 2.58224453  
Iteration 52, loss = 2.57365748  
Iteration 53, loss = 2.56256769  
Iteration 54, loss = 2.55180372

Iteration 55, loss = 2.55494584  
Iteration 56, loss = 2.54114076  
Iteration 57, loss = 2.53788356  
Iteration 58, loss = 2.52500579  
Iteration 59, loss = 2.52659524  
Iteration 60, loss = 2.51544804  
Iteration 61, loss = 2.51384521  
Iteration 62, loss = 2.50544617  
Iteration 63, loss = 2.49721502  
Iteration 64, loss = 2.48052970  
Iteration 65, loss = 2.48071542  
Iteration 66, loss = 2.46623749  
Iteration 67, loss = 2.47076311  
Iteration 68, loss = 2.46482801  
Iteration 69, loss = 2.45392377  
Iteration 70, loss = 2.45443420  
Iteration 71, loss = 2.44488595  
Iteration 72, loss = 2.44062629  
Iteration 73, loss = 2.43266350  
Iteration 74, loss = 2.42929430  
Iteration 75, loss = 2.43427827  
Iteration 76, loss = 2.41285940  
Iteration 77, loss = 2.41314613  
Iteration 78, loss = 2.41192247  
Iteration 79, loss = 2.39874054  
Iteration 80, loss = 2.40391244  
Iteration 81, loss = 2.39554476  
Iteration 82, loss = 2.37710034  
Iteration 83, loss = 2.38759922  
Iteration 84, loss = 2.37708165  
Iteration 85, loss = 2.36093368  
Iteration 86, loss = 2.36446883  
Iteration 87, loss = 2.35945174  
Iteration 88, loss = 2.35706495  
Iteration 89, loss = 2.35718476  
Iteration 90, loss = 2.35091384  
Iteration 91, loss = 2.33349460  
Iteration 92, loss = 2.33242113  
Iteration 93, loss = 2.34260580  
Iteration 94, loss = 2.33650557  
Iteration 95, loss = 2.32483530  
Iteration 96, loss = 2.31221953

Iteration 97, loss = 2.30065652  
Iteration 98, loss = 2.31756355  
Iteration 99, loss = 2.29939438  
Iteration 100, loss = 2.30611209  
Training set score: 42.33%  
Test set score: 22.89%