

PyTorch Week 2

LeNet-5 with MNIST

Request

1. Create neural network : LeNet-5 with PyTorch API.
2. Training the NN with MNIST Dataset.
3. Testing your training result.

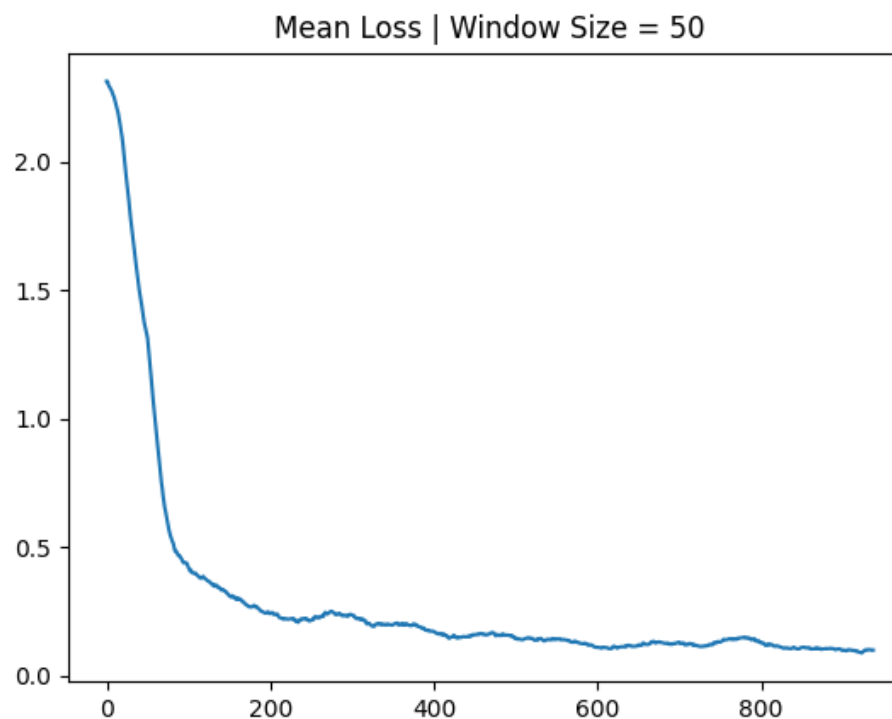
Submit your python code before 8/8.

Result

As the following picture,
my batch size is **64** and
the final accuracy is
96.84% on the testing set.

```
training...  
Batch : 0/60000 | Loss : 2.3140  
Batch : 6400/60000 | Loss : 0.1974  
Batch : 12800/60000 | Loss : 0.1680  
Batch : 19200/60000 | Loss : 0.1654  
Batch : 25600/60000 | Loss : 0.1731  
Batch : 32000/60000 | Loss : 0.1764  
Batch : 38400/60000 | Loss : 0.1775  
Batch : 44800/60000 | Loss : 0.0712  
Batch : 51200/60000 | Loss : 0.0682  
Batch : 57600/60000 | Loss : 0.0491  
(testing...)  
Acc : 96.84%
```

Figure 1



Some Hints

- Following the reference to build your project.
- Plotting the loss to verify your network convergence correctly.

Reference :

- <https://pytorch.org/tutorials/beginner/basics/intro.html>
- <https://reurl.cc/KQjW6n>(LeNet-5)