CENG5030 Lab 02

Training Strategies

1 Sample Code:

- Go to the `./Lab02-code/residual_network/`
- Run `python main.py` in your terminal
- You can change many places in the code to tune the network performance
  - Hyper-parameters
  - Structure of neural network
  - Loss function and optimizer

2 Assignments:

Q1 Change the parameters mentioned in `main.py` to get a high accuracy of your new model and write down your configuration

Q2 Build and train a RNN model from scratch

- Dataset: MNIST
- Network: Recurrent Neural Network (many-to-one)
  - Sequence_Length: 28
  - Hidden_Size: 128
  - Num_Layers: 2
- Test your model (RNN) and get the accuracy on test dataset

Useful Materials:

- MNIST Dataset
- Recurrent Neural Networks cheatsheet
- PyTorch Tutorial: RNN

Tips: You should learn the code style from the sample code to build your project.