Recurrent neural netowrk(rnn)

# library link

<https://github.com/pytorch/pytorch/blob/master/torch/nn/modules/rnn.py>

# basic description

RNN(Recurrent Neural Network) is a sequence model that processes inputs and outputs in sequence units. If you think about the translator, input is a sentence, a sequence of words you want to translate. The translated sentewnce corresponding to the output is also a sequence of words. Models designed to process sequences like this are called sequence models. Among them, RNN is the most basic artifical neural network sequence model.

# version

* Pytorch >= 1.10.1+cu102 (pip install pytorch)
* Torchtext >= 0.11.1 (pip install torchtext)
* Numpy >= 1.19.4 (pip install numpy)
* Pandas >= 1.0.1 (pip install pandas)
* matplotlib >= 3.1.3 (pip install matplotlib)
* Colab

# dataset

* KOSPI time series data set.
* Download and upload. (google drive)

<https://drive.google.com/file/d/1L-DXqRNV-qUX60mVJ0HsOcjX1RhoWkjC/view>

# code description

* Code for predicting stock prices using KOSPI time series datasets.

# validation

* After dividing into training data and test dat in the KOSPI time series dataset, training data is learned, verified based on test data, and displayed as a graph.