LAB Logbook

Lab 1

A line graph with red dots

AI-generated content may be incorrect.

Lab 2

Test Accuracy: 0.862

A screenshot of a computer

AI-generated content may be incorrect.

A blue line graph with numbers

AI-generated content may be incorrect.

Lab 3

Test accuracy: 0.8924999833106995

A screenshot of a computer

AI-generated content may be incorrect.

Lab 4

absolute prediction error = 54302.0 $

relative prediction error = 24.47138350608382 %

A graph showing a line

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

Lab 5

A screenshot of a computer

AI-generated content may be incorrect.

A graph with blue dots

AI-generated content may be incorrect.

The Optimal Number of Epochs for training my model: 15

Minimum validation loss : 0.9141

Lab 6

A screenshot of a computer

AI-generated content may be incorrect.

A computer code with black text

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

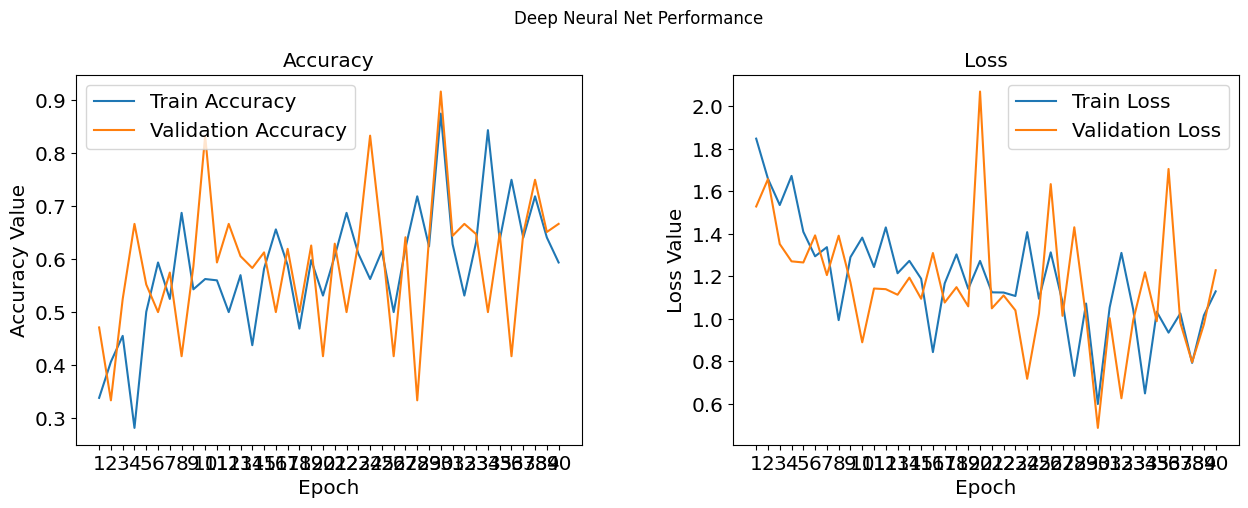
A graph with blue dots

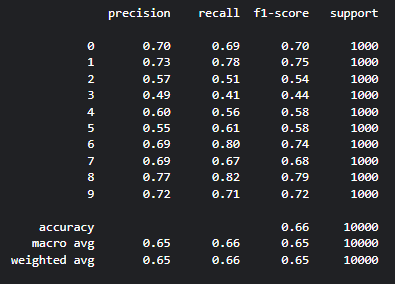
AI-generated content may be incorrect.

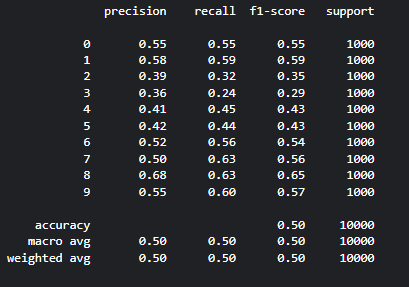
Minimum Validation Loss: 0.0014

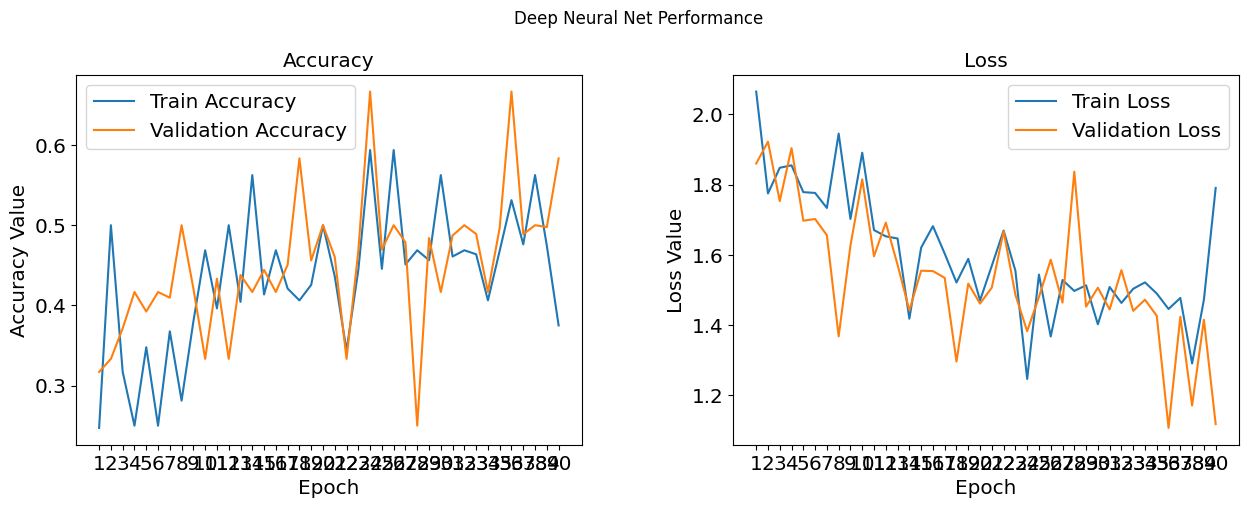
The Optimal Number of Epochs for training my model: 7

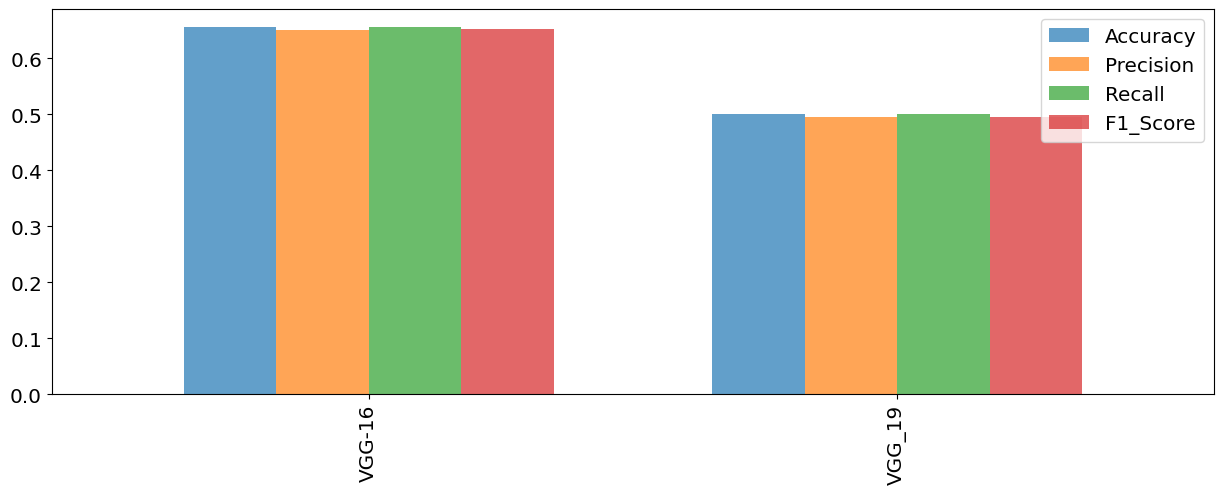
Lab 7











Lab 8

LSTM Architecture

A screenshot of a computer

AI-generated content may be incorrect.

Code Training and Result

A screenshot of a computer

AI-generated content may be incorrect.

A close up of a computer code

AI-generated content may be incorrect.

A screenshot of a computer error

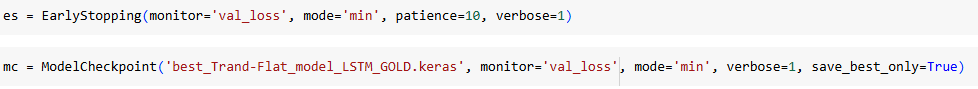
AI-generated content may be incorrect.

A graph with lines and dots

AI-generated content may be incorrect.

Lab 9

Early Stopping and Modal Check Points functions



A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

Test Accuracy and Error Metrics

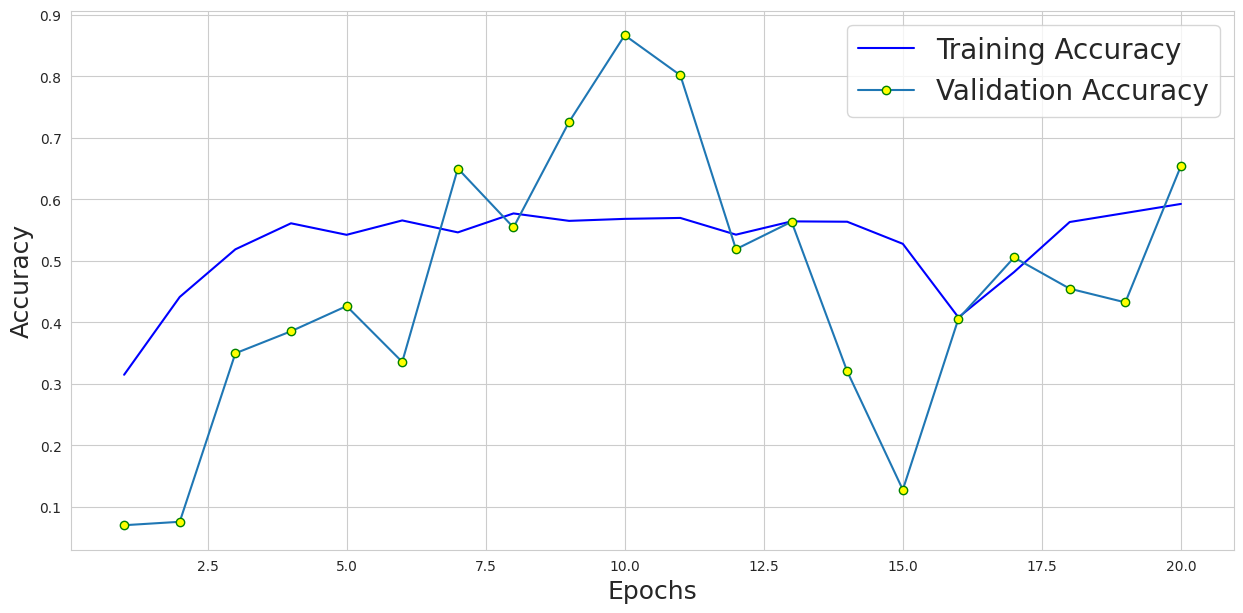
A close up of text

AI-generated content may be incorrect.

A screenshot of a computer

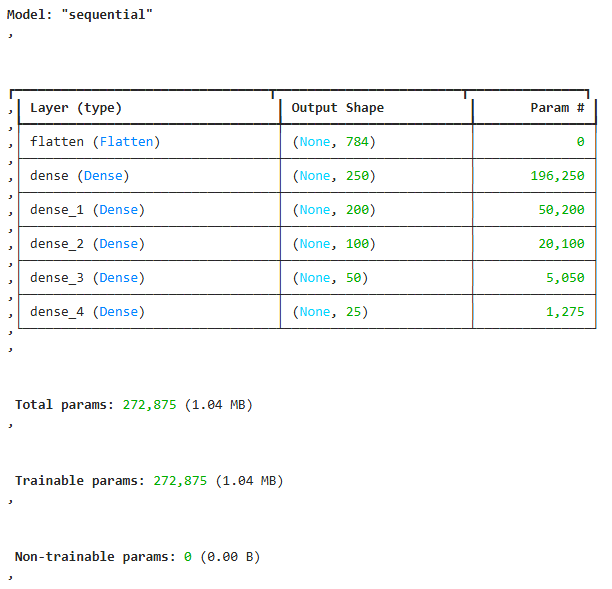
AI-generated content may be incorrect.

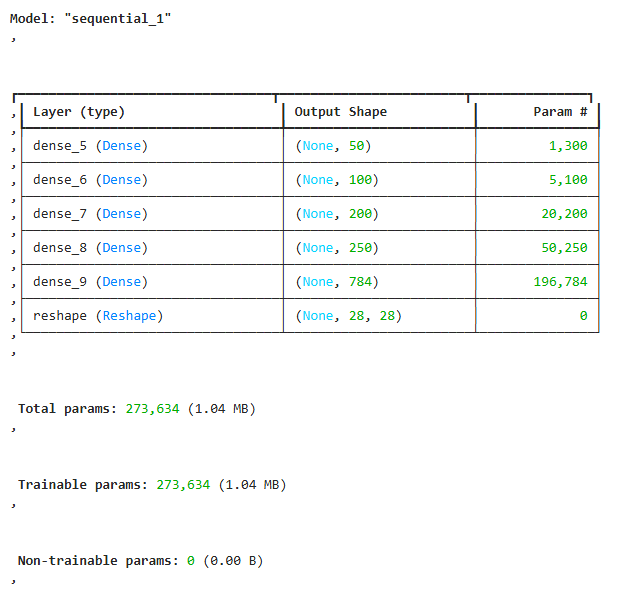
Accuracy Graph

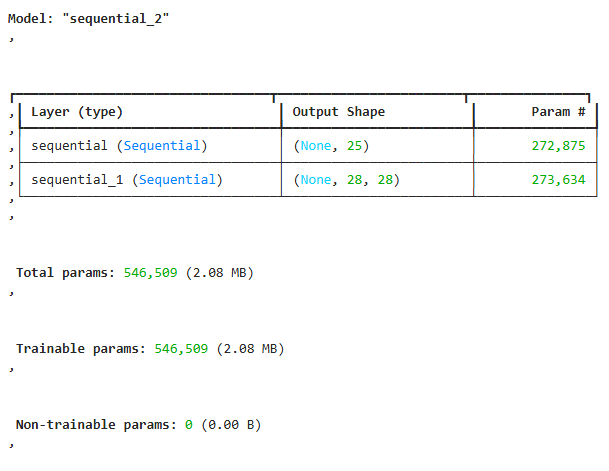


Lab 10

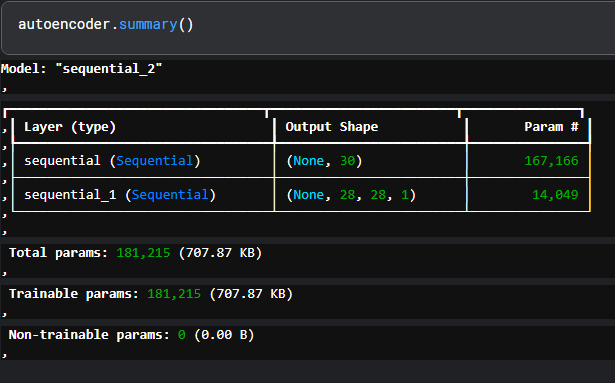
Simple AutoEncoder



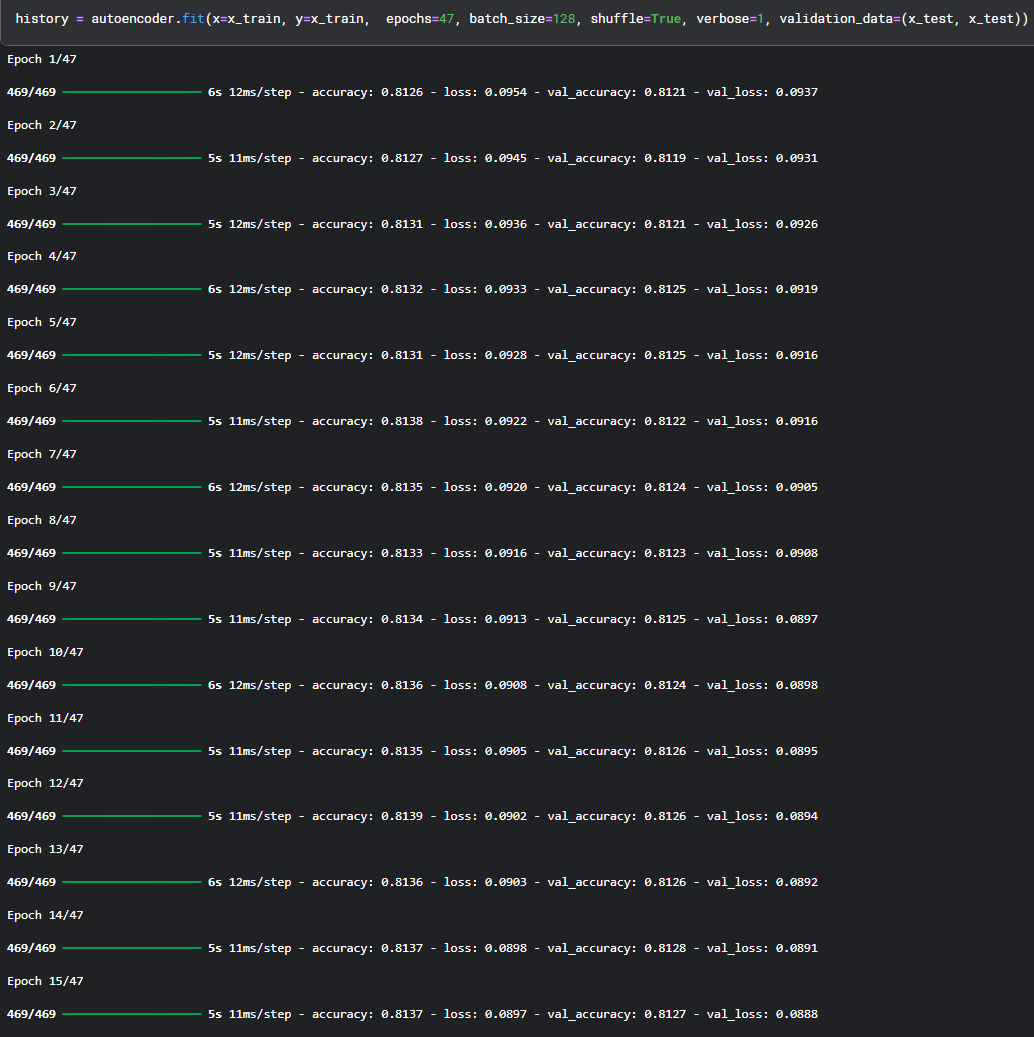


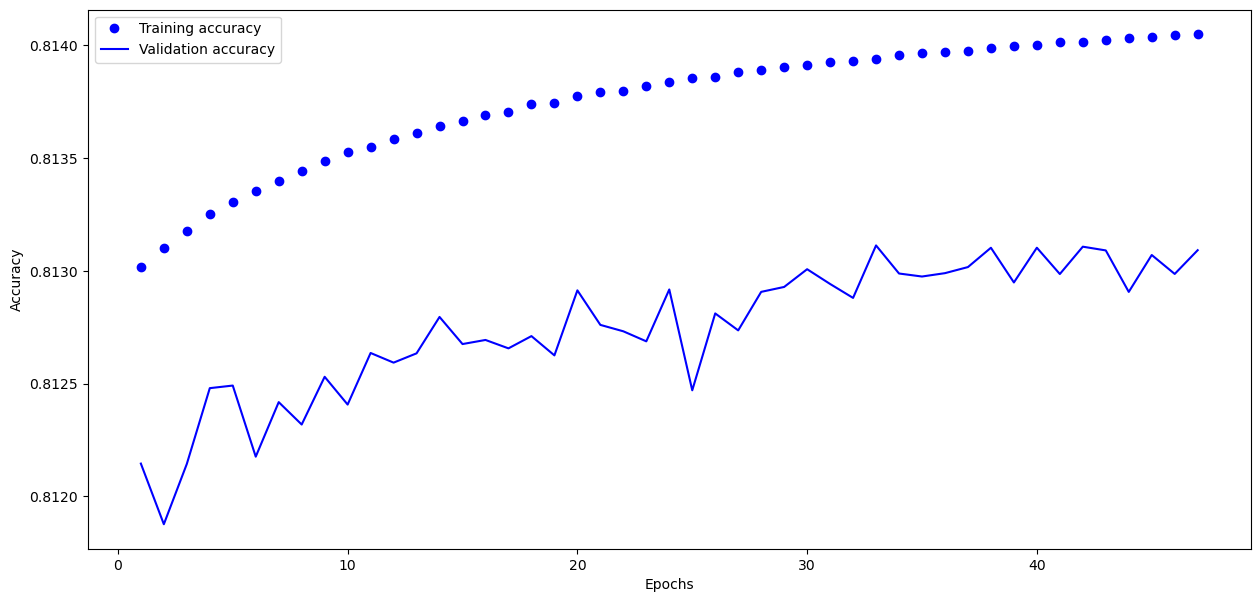


CNN AutoEncoder



Code of autoencoder.fit()



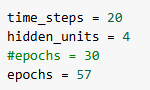


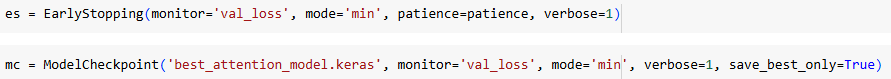
Lab 11

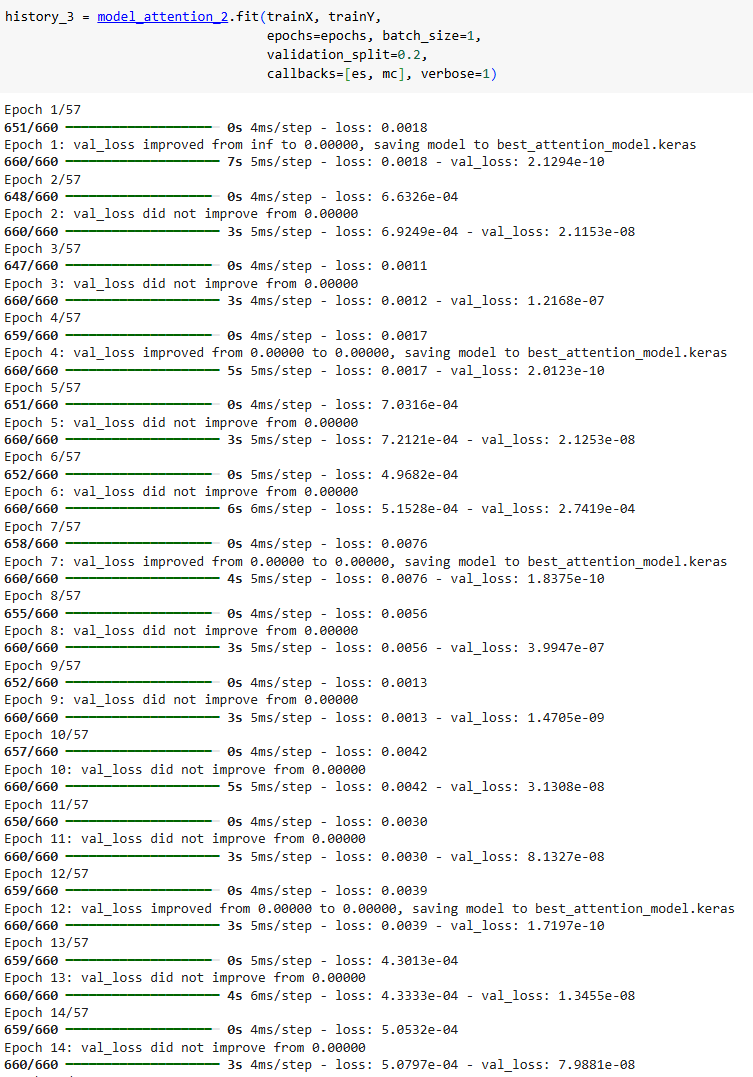
A screenshot of a computer screen

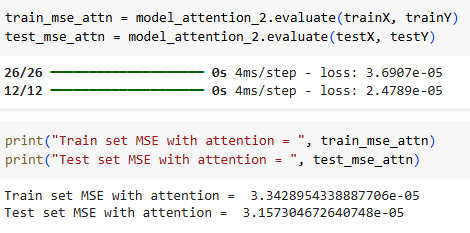
AI-generated content may be incorrect.

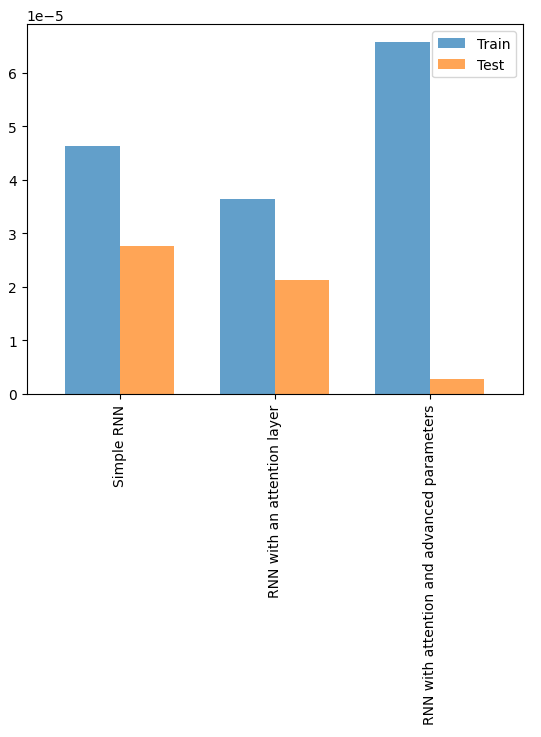
Lab 12











Github Link: https://github.com/APJ-Aswin-Porkodiyaan-Jeyaraj/Deep-Learning-and-Neural-Netwoks