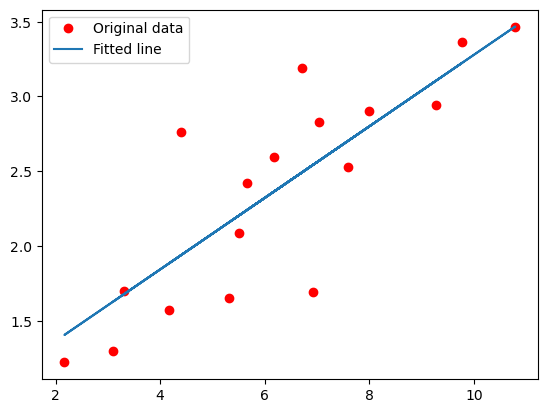
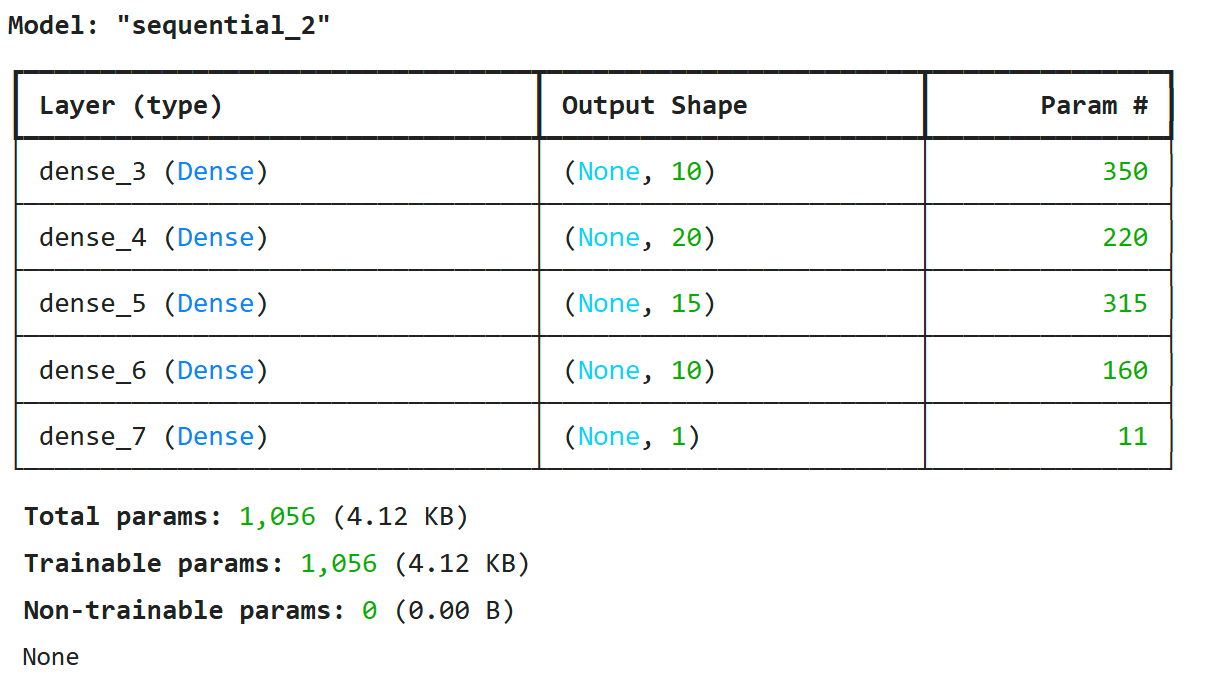
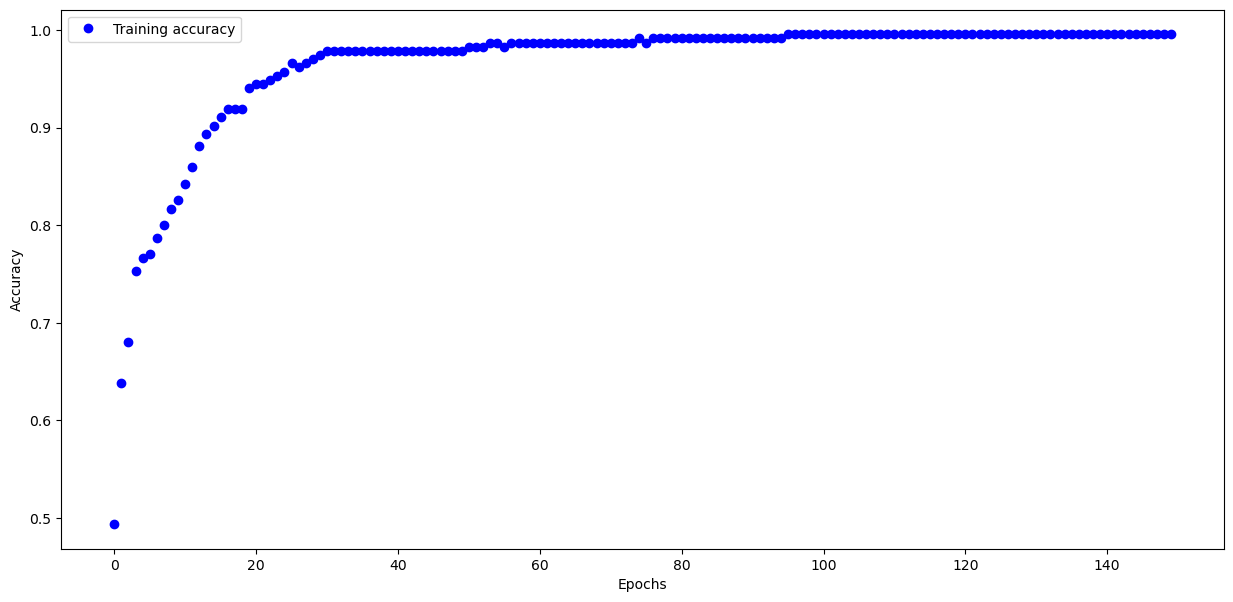
LAB Logbook

Lab 1



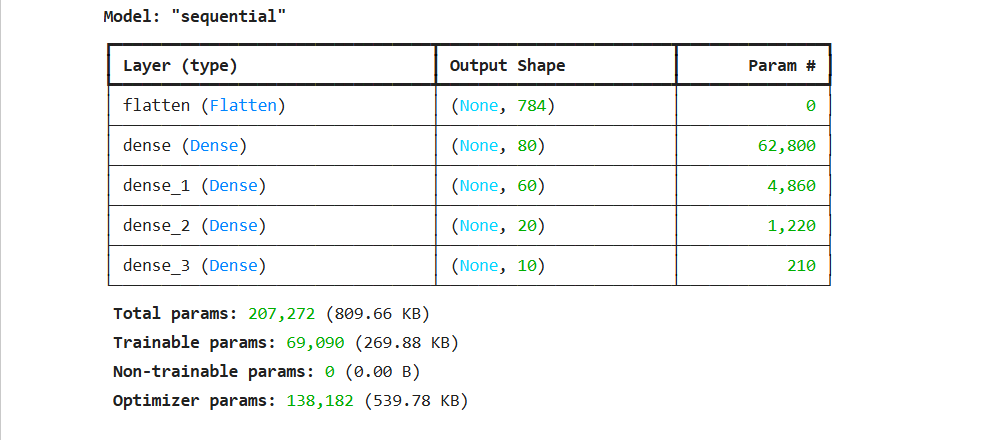
Lab 2





Lab 3

Test accuracy: 0.8855999708175659



Lab 4

**Model: "sequential\_2"**

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┃ **Layer (type)** ┃ **Output Shape** ┃ **Param #** ┃

┡━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━╇━━━━━━━━━━━━━━━━━━━━━━━━╇━━━━━━━━━━━━━━━┩

│ dense\_6 (Dense) │ (None, 152) │ 3,040 │

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│ dense\_7 (Dense) │ (None, 64) │ 9,792 │

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│ dense\_8 (Dense) │ (None, 32) │ 2,080 │

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│ dense\_9 (Dense) │ (None, 1) │ 33 │

└─────────────────────────────────┴────────────────────────┴───────────────┘

**Total params:** 14,945 (58.38 KB)

**Trainable params:** 14,945 (58.38 KB)

**Non-trainable params:** 0 (0.00 B)

None

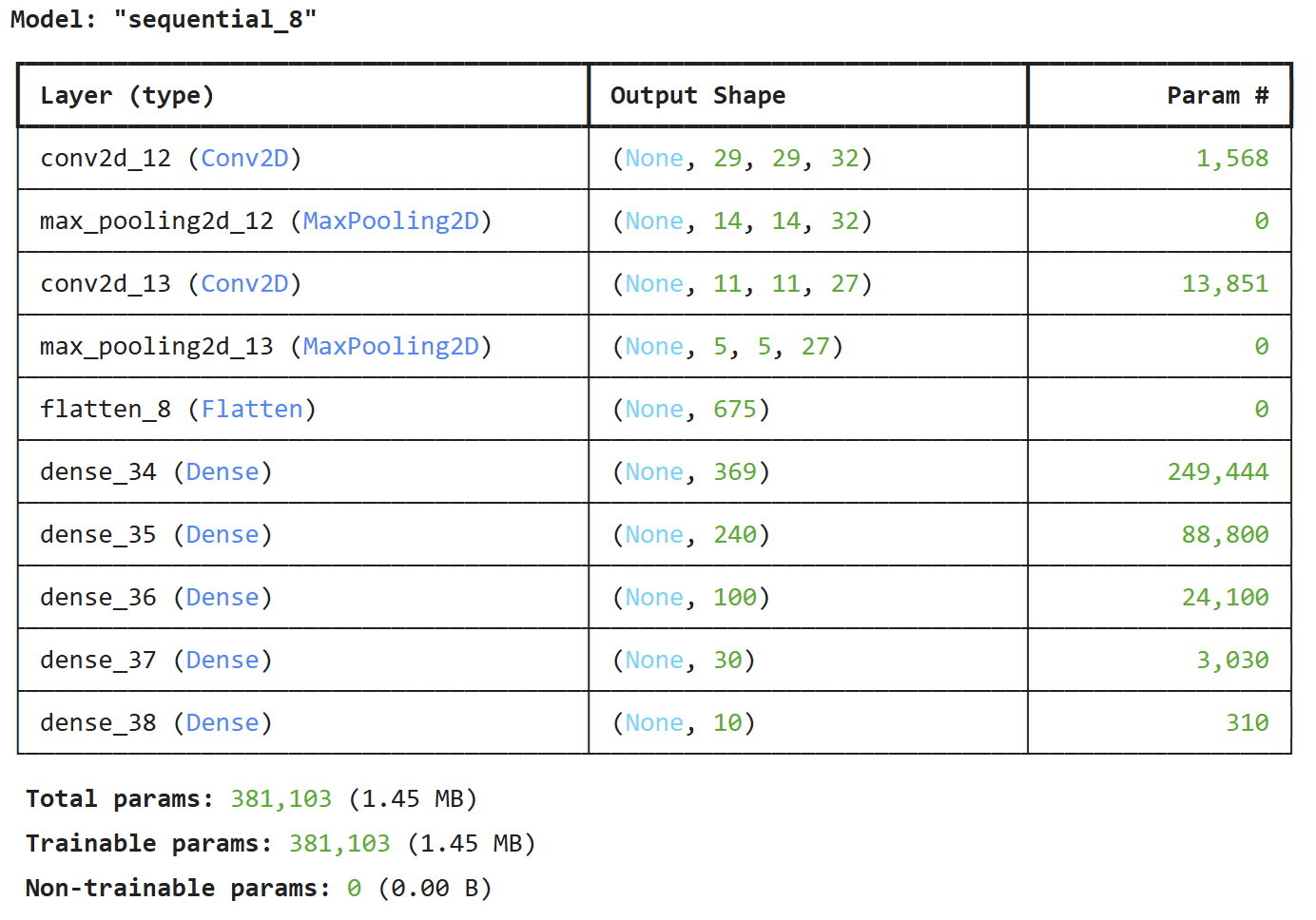
A graph with blue dots

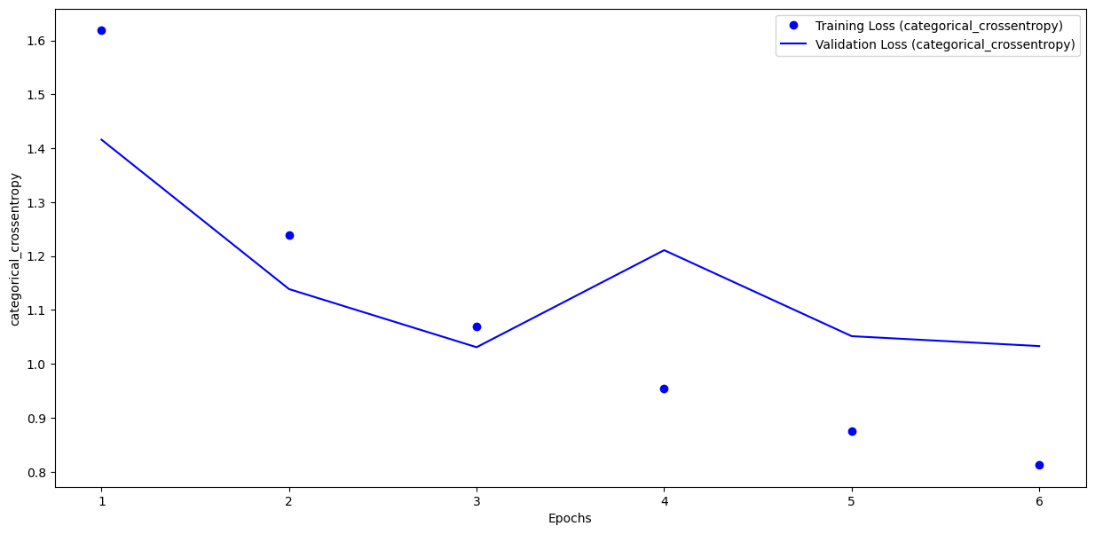
AI-generated content may be incorrect.

**absolute prediction error = 68057.0 $**

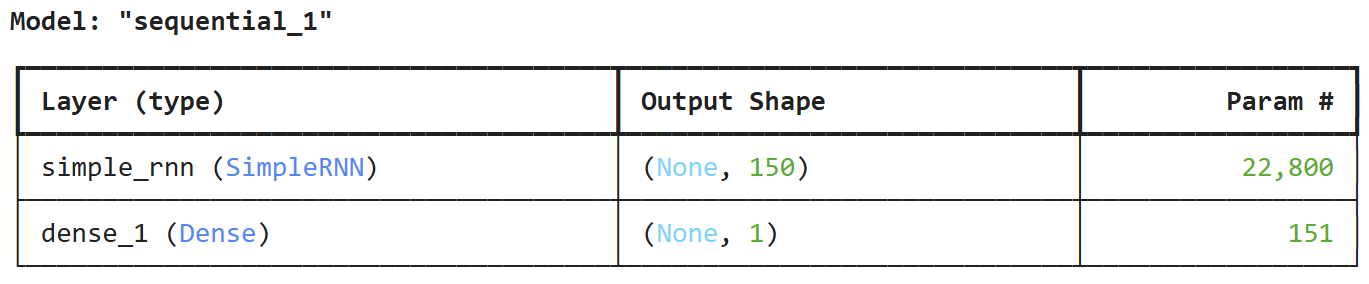
**relative prediction error = 30.670121676430824 %**

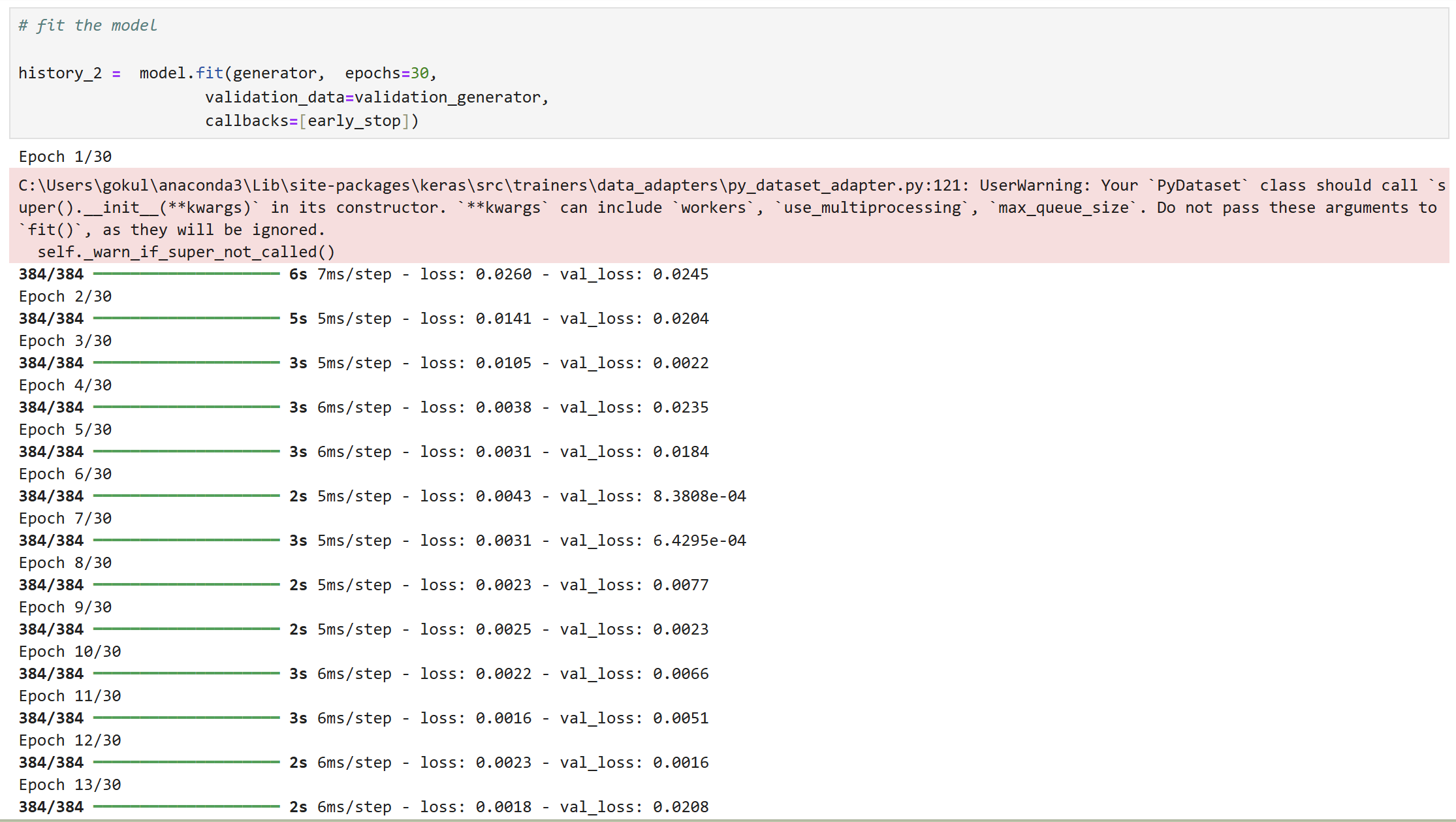
Lab 5

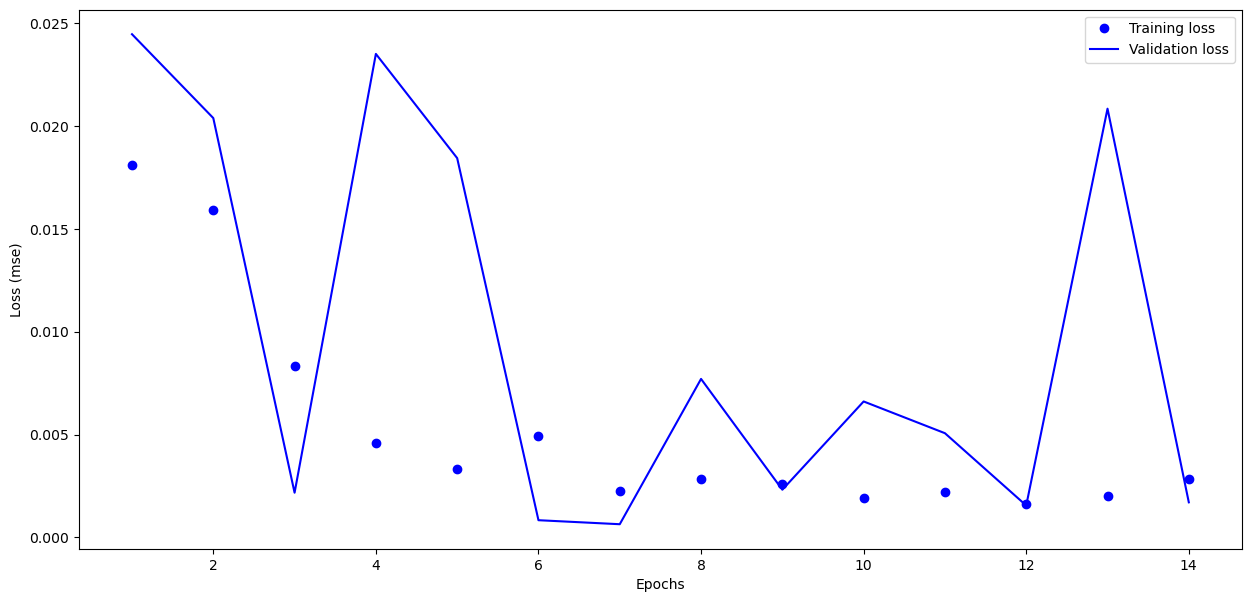




Lab 6



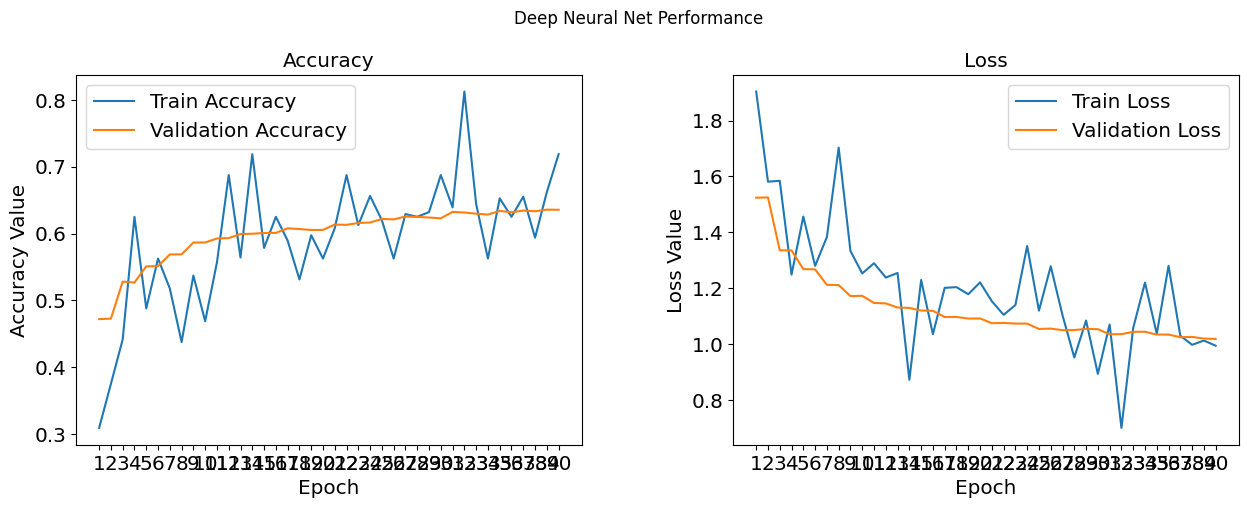


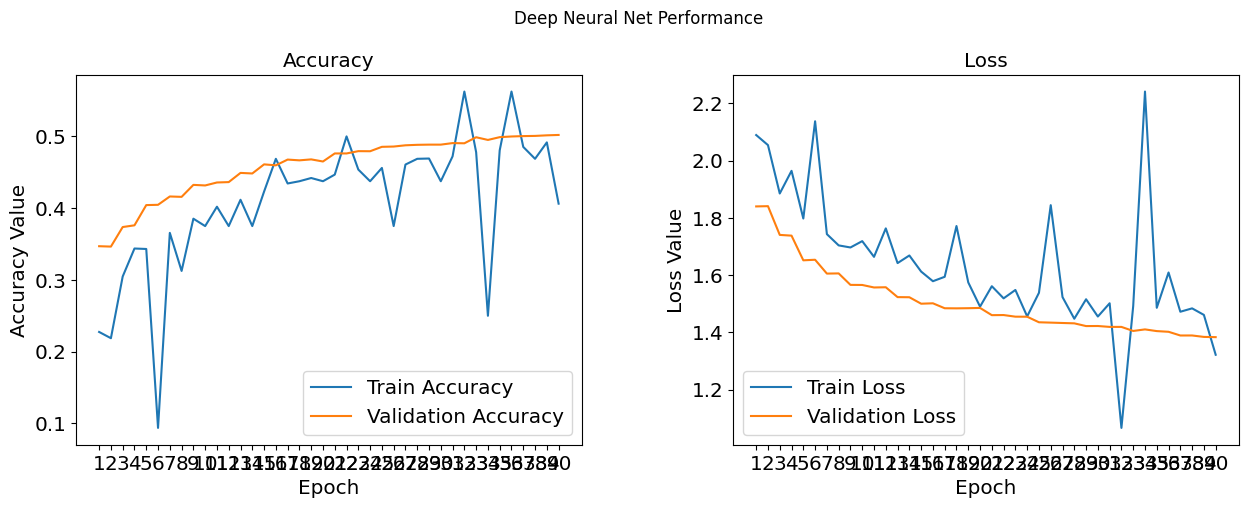


Epochs = 14

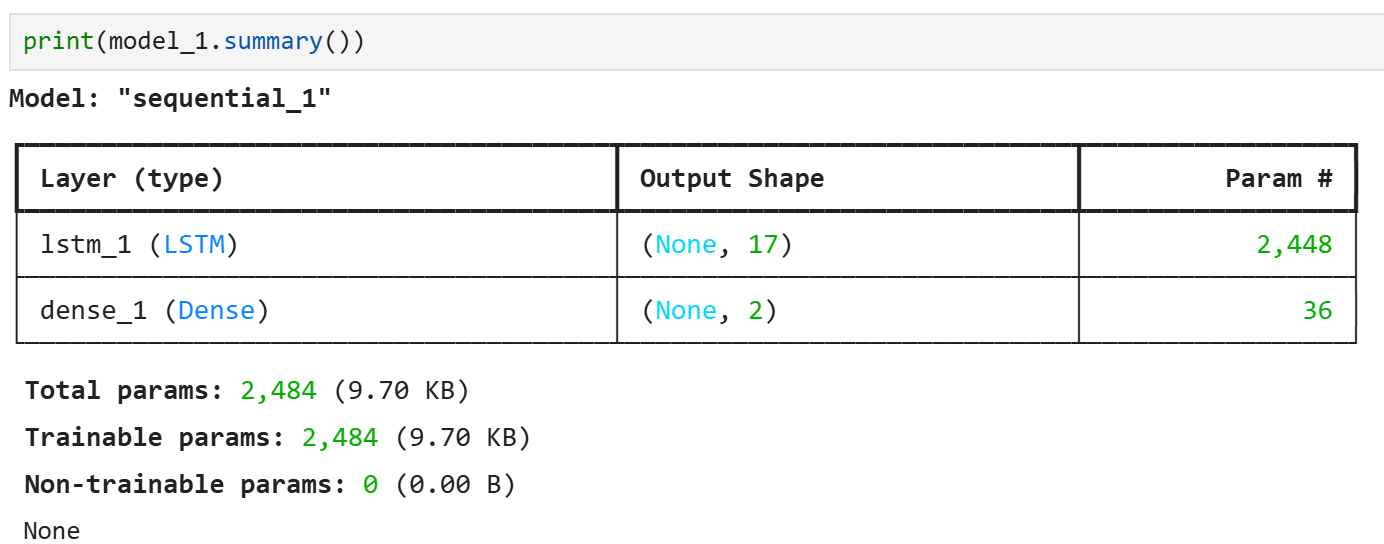
Lab 7

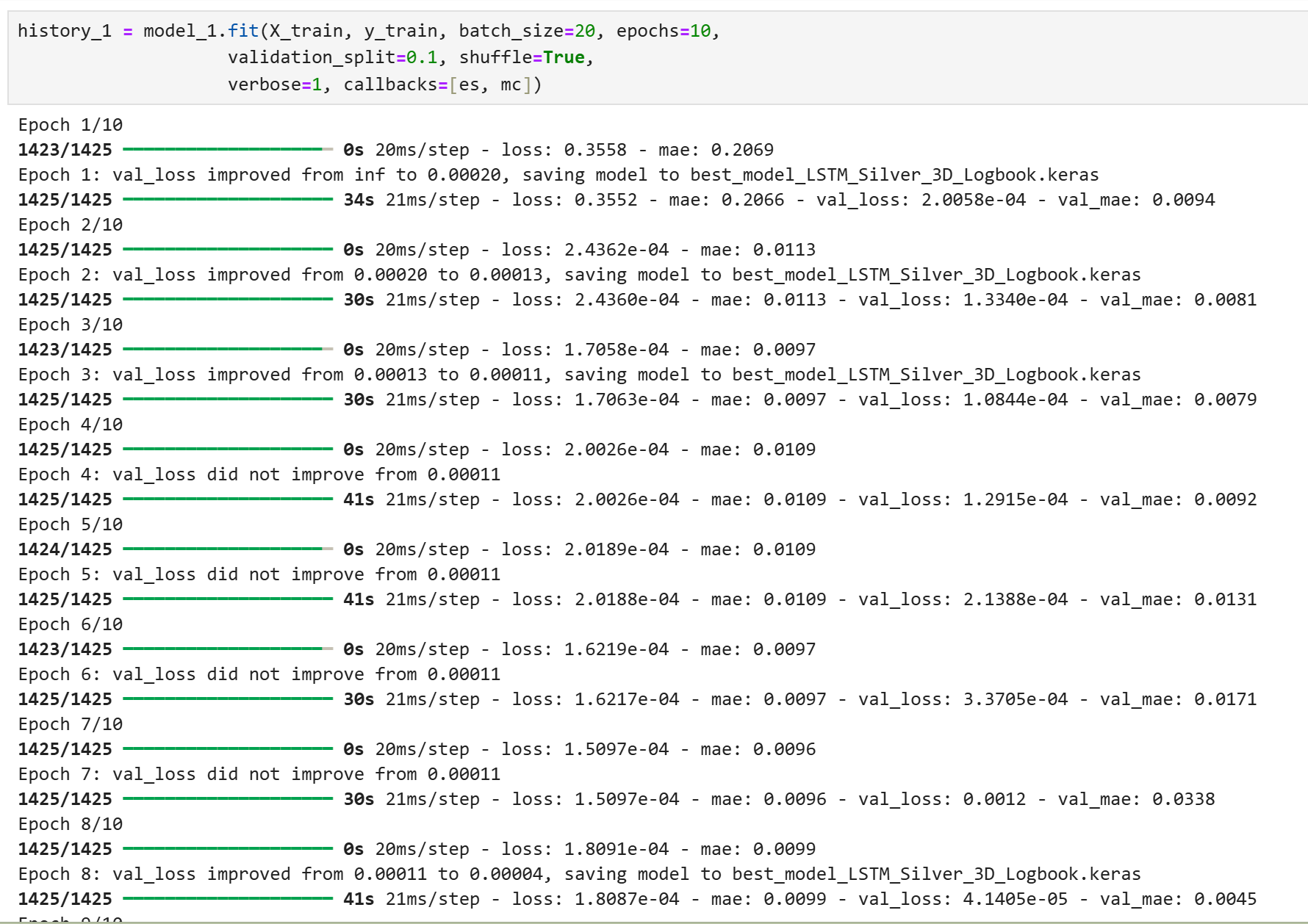
Graphs for Accuracy and Loss Function for VGG16 and VGG19

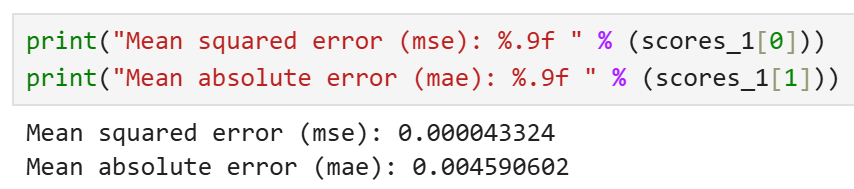


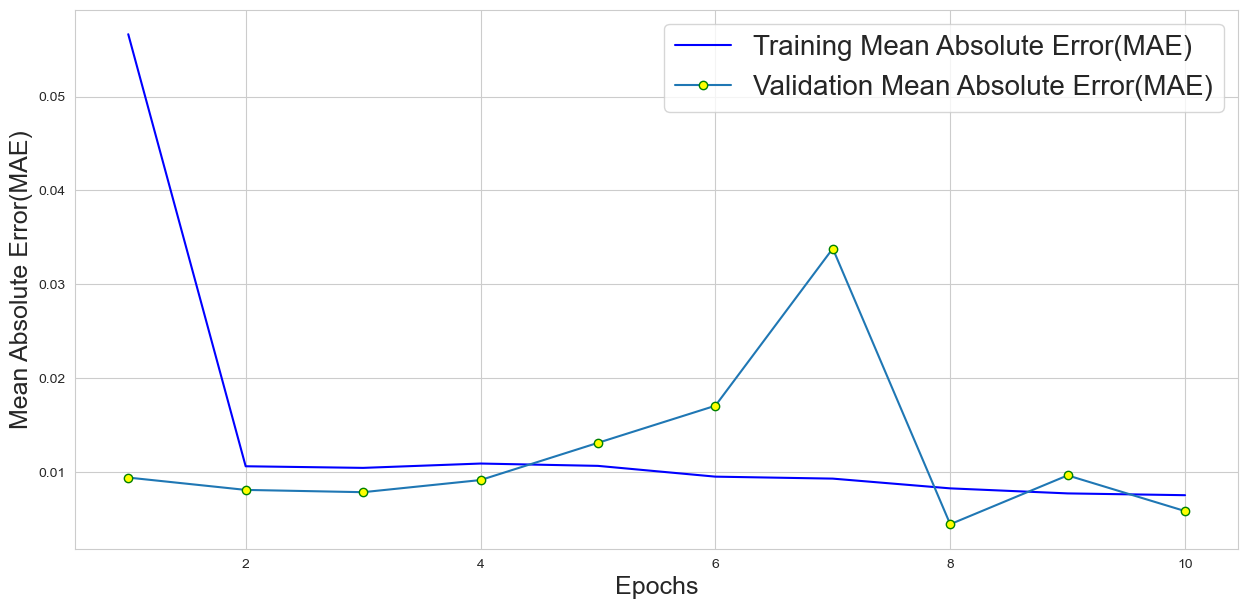


Lab 8

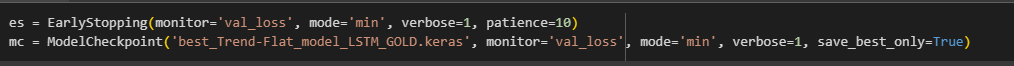


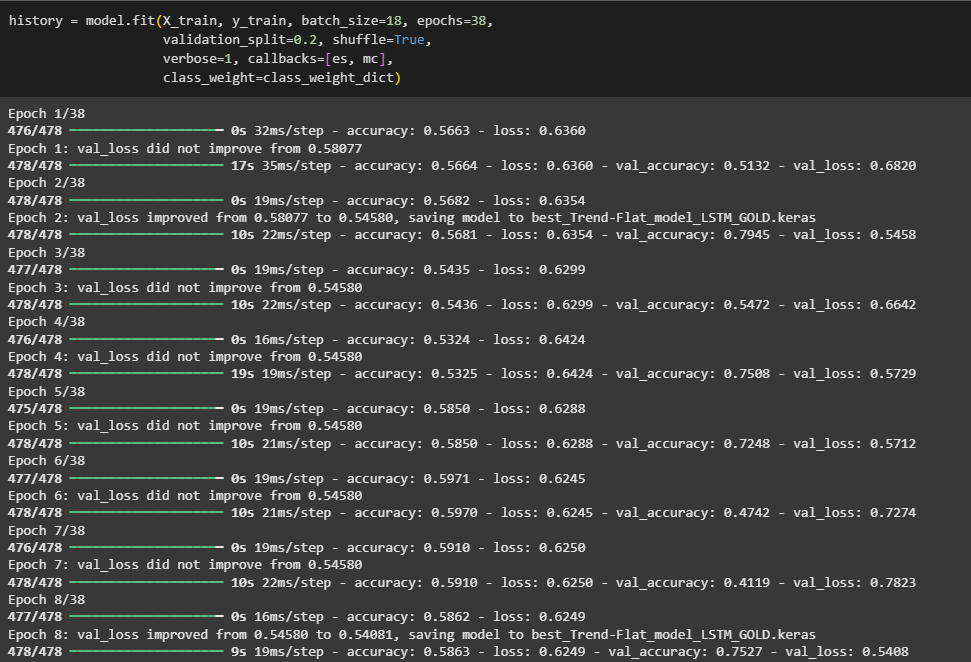


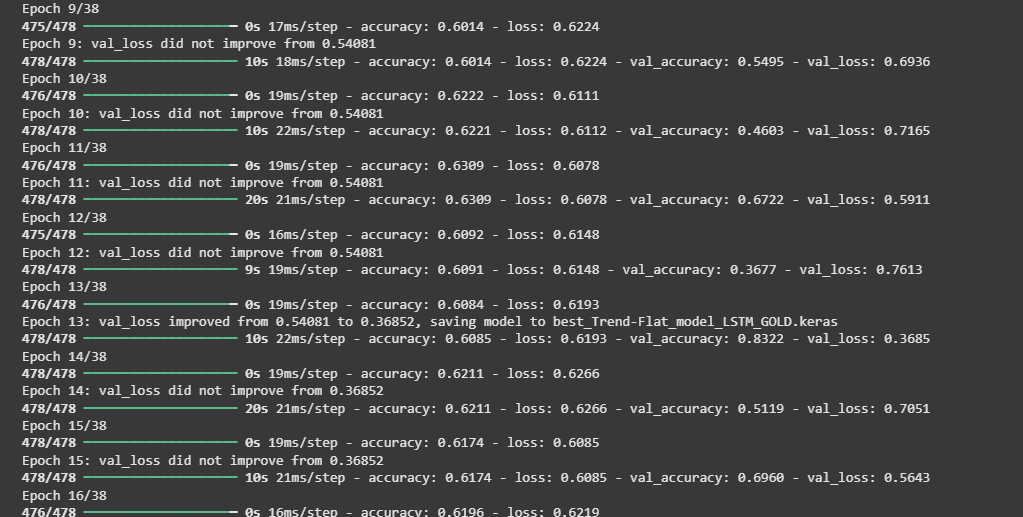


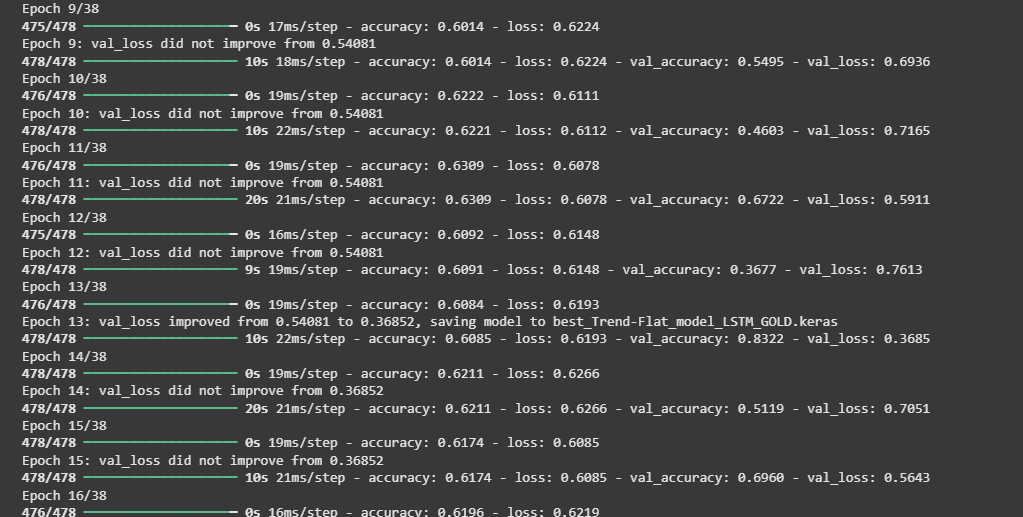


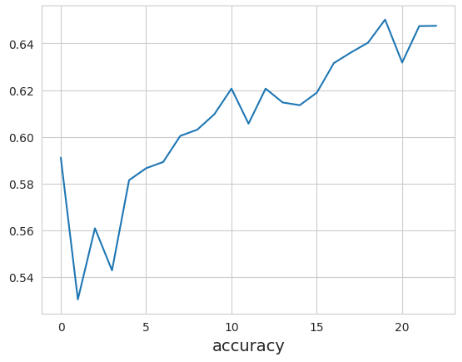
Lab 9

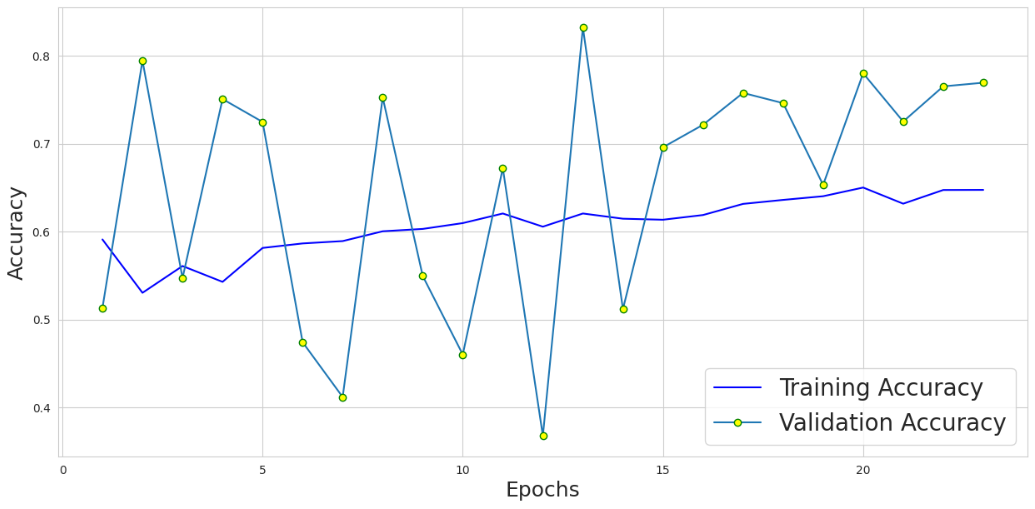


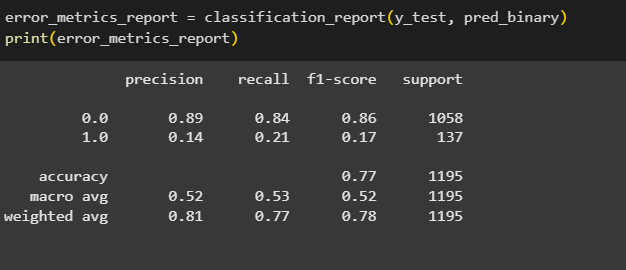






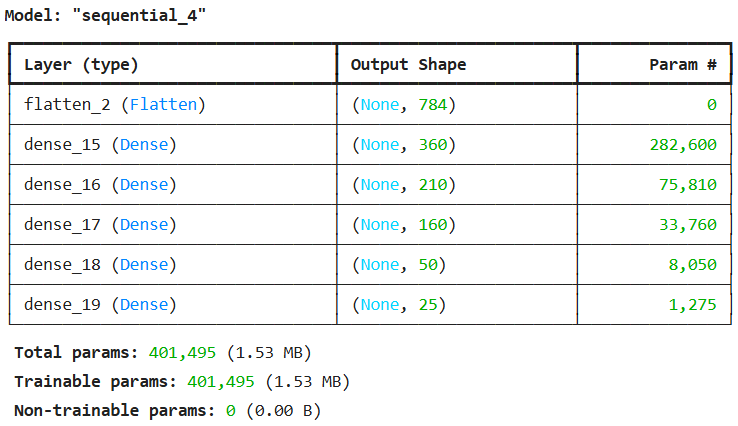




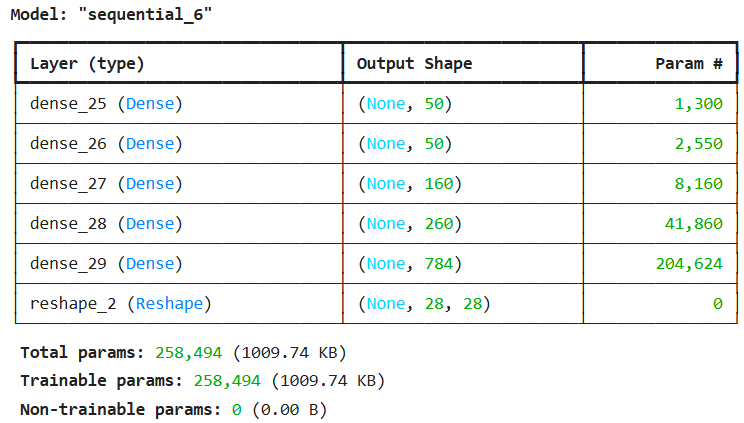


Lab 10

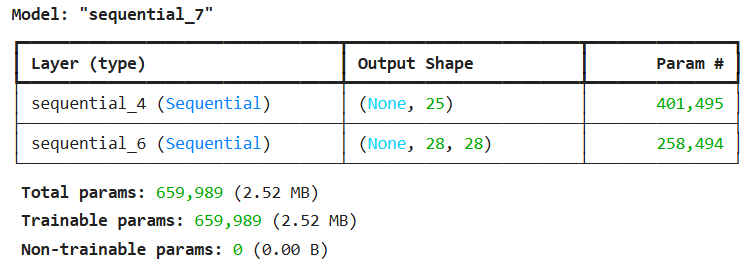
Task 1 – Encoder



Decoder

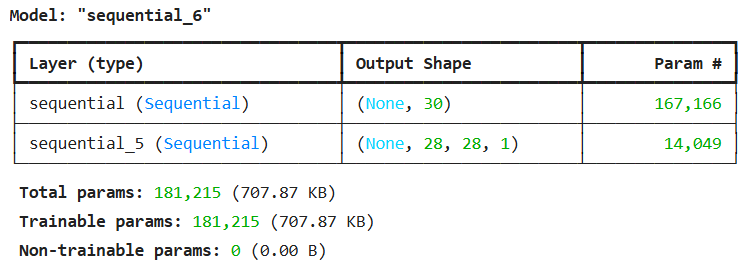


Autoencoder 1

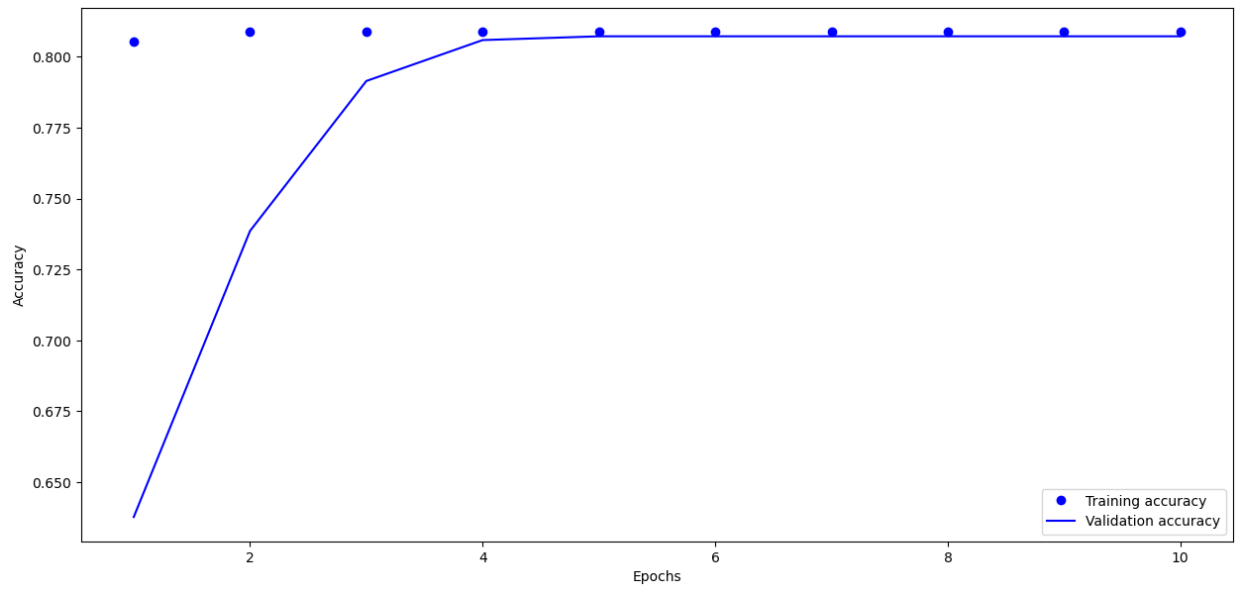


Task 2

Autoencoders 2



history\_2 = autoencoder.fit(x=x\_train, y=x\_train, epochs=48,batch\_size=128,shuffle=True, verbose=1,validation\_data=(x\_test, x\_test))



Lab 11

Lab 12

https://github.com/gokuljayan555/Neural-Networking/blob/main/LAB%20logbook.docx