Exercise 2.5: *Visual Applications of Machine Learning*

Part 1:

Due to Python crashing, the last step of the script did not succeed, therefore no of my handwritten numbers were recognised.

Part 2:

I used 12 epochs for the following results:

Accuracy: 0.9166666865348816, Val_Accuracy: 1.0
Loss: 0.04666644707322121, Val_Loss: 0.029537610709667206

GANs could be used to predict how weather would look like in a very similar way as other ML algorithms, but displaying the predictions in a graphic manner, making it more accessible to the general public. For example the question ‘What will a day of July in Madrid look like in 2030?’ could be answered with a GAN generated picture.

GANs can be also used to define how a regular day in a certain area might look, to answer questions such as ‘How does a regular day look like in Oslo?’

Another way in which GANs can be used for weather prediction is to answer how tomorrow will look like ‘What will the weather be like tomorrow?’