Reflection: HW 4

1. How do the training times compare between the two model types?

A: I found a significant difference when the model is training, The UNET(deep) was able to do one epoch in about 500ms whereas the auto encoder(shallow) took longer in terms of 3 seconds per epoch. It is due to the skip connection as the gradients can take the shorter path.

2. Describe the relative performance of the two model types.

A: The performance between the autoencoder and the unet was similar with the UNET performing slightly better than the Autoencoder.

3. Describe any qualitative differences between the outputs of the two model types.

A: The UNET was able to retain the structure in tits predictions as compared to the Auto encoders, but the auto encoder was able to predict the general class better than the UNET.