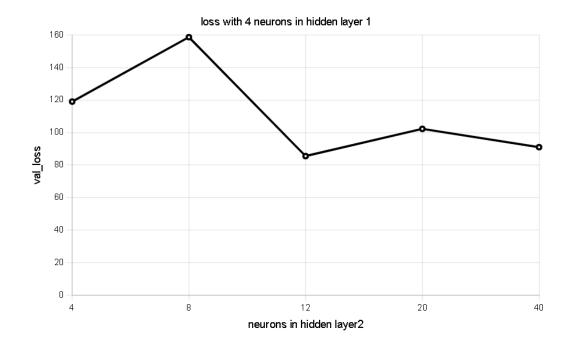
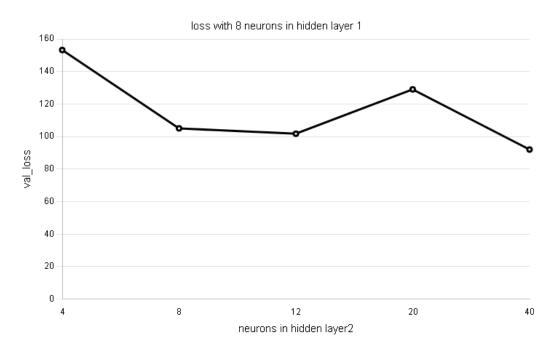
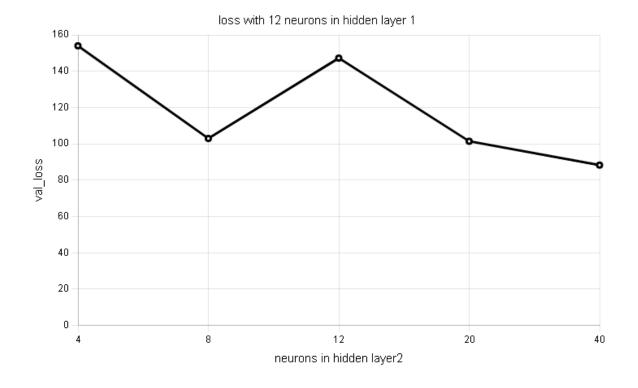
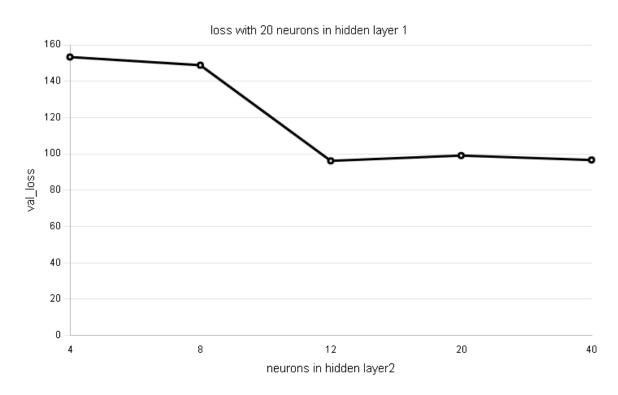
#COMP 4107 assignment 2
#Alexander Breeze 101 143 291
#Michael Balcerzak 101 071 699
#Ifeanyichukwu Obi 101 126 269

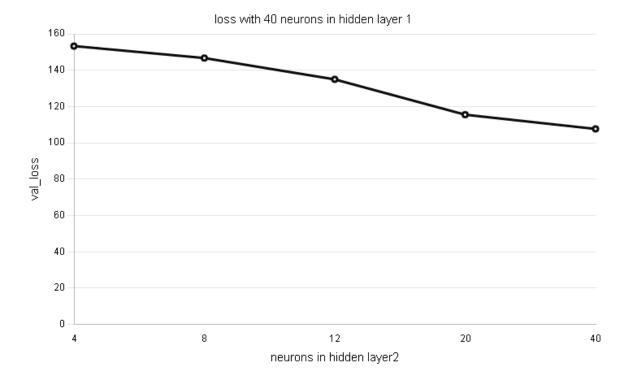
4a)





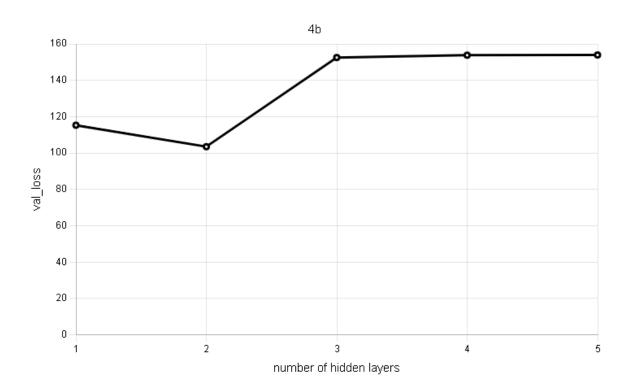






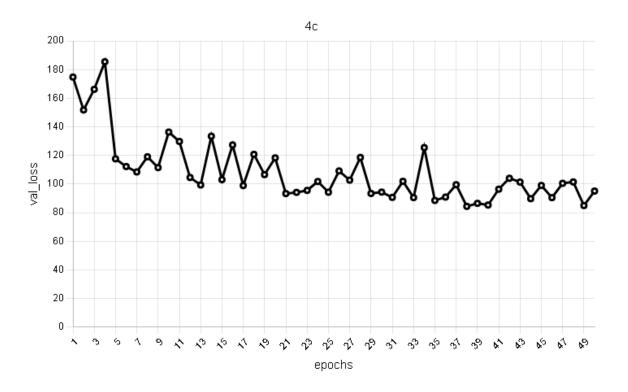
We conclude that the ideal number of neurons in hidden layers is approximately 20.

4b)



From this we conclude that, give 20 neurons per hidden layer, the ideal number of hidden layers is at least 3, with 4 being slightly superior.

4c)



From this, given that we have 4 hidden layers with 20 neurons each, we conclude that 38 epochs of training is approximately optimal.

4d)

With 4 hidden layers of 20 neurons each, trained for 38 epochs, we get the following results (with some variability):

Training loss: 267 Validation loss: 285

Test loss: 287