Order\_Error\_plots.m :- This file is used for generating order parameters and generalization error plots for individual learning rates. To try out different learning rates , simply uncomment the comments below learning rate variable.

In the end there is a comment, with “No optimisation”, this was used to generate the combined graph for learning rate, nesterov and momentum generalization error plot. This comment is also present in the matlab files for meomentum and nesterov. Simply run the script to test

Neural\_momentum.m :- This file contains the code for the momentum optimization technique. Simply run the script to test.

Nesterovacceleratedgradient.m :- This file contains the code for the Nesterov accelerated gradient optimization technique. Simply run the script to test.

Neural\_learningrate.m :- This file contains the code for generating the combined plot for generalization error for different learning rates. Simply run the script to test

Generalizationerror.m :- This file has the function used to compute the generalization error.

Restarts.m :- The file that has code for Adaptive learning rates (section 3.4). Run the script to test.