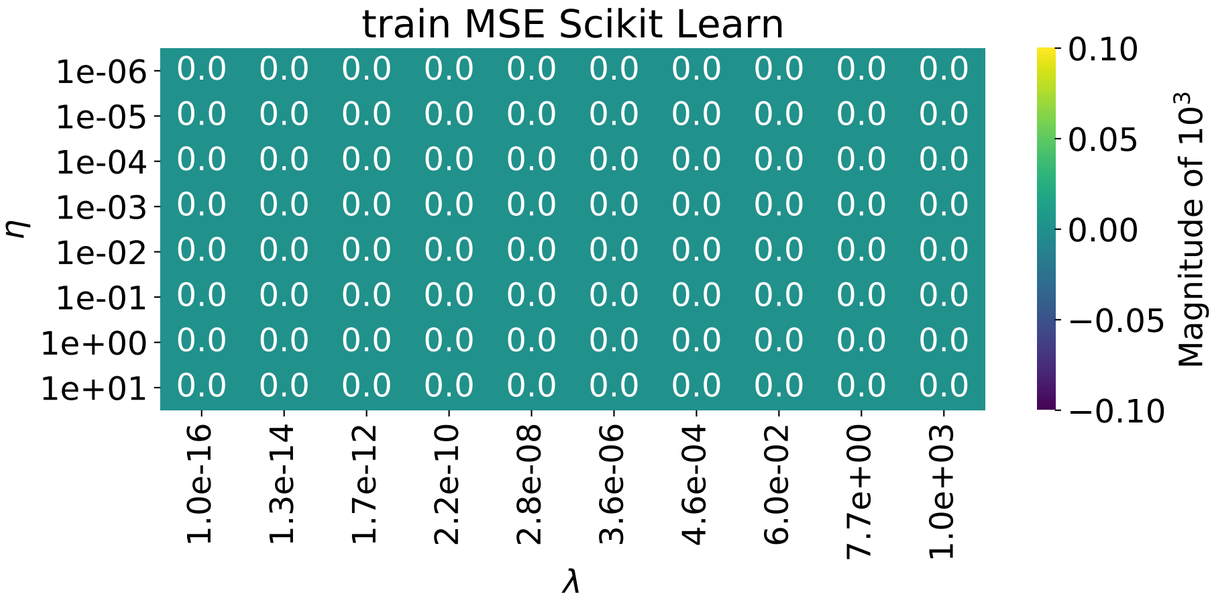
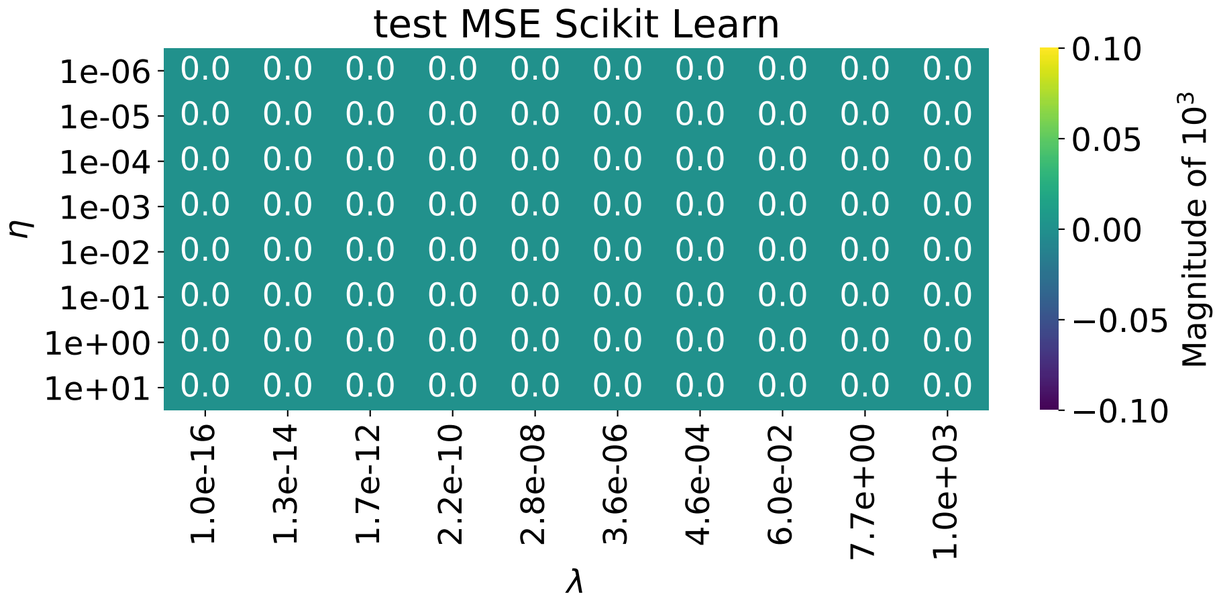
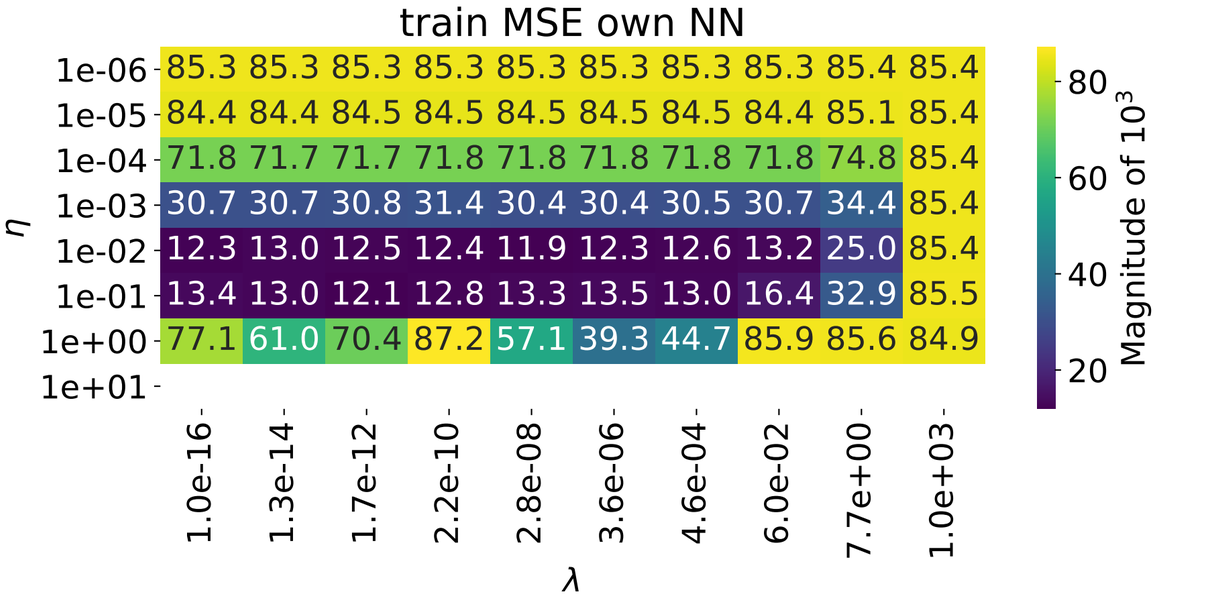
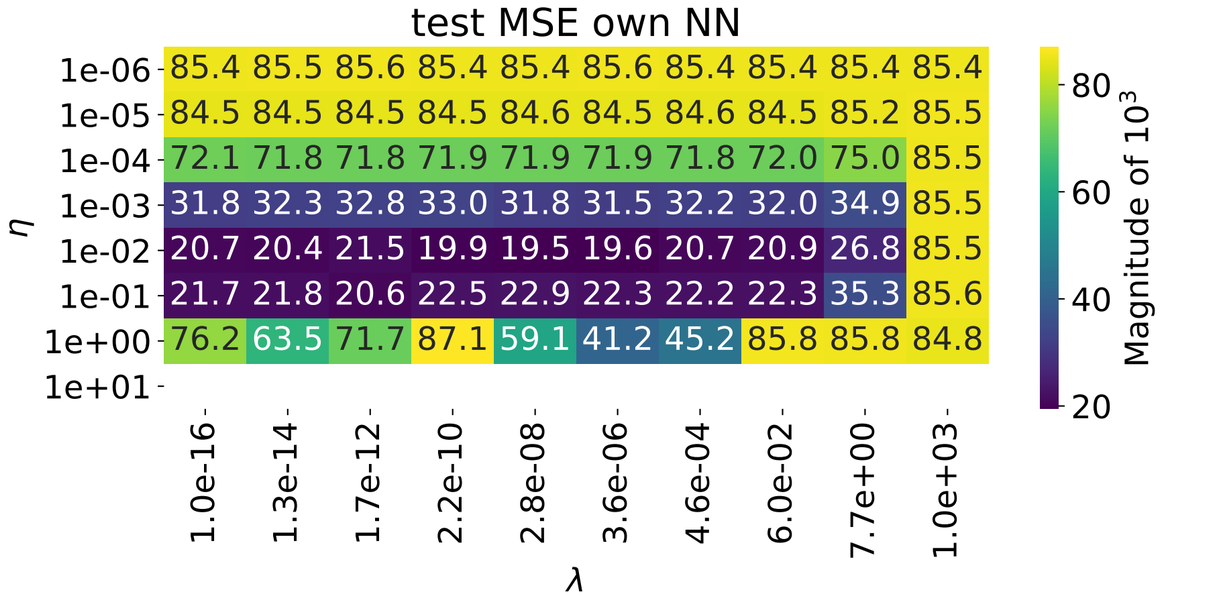

train MSE Scikit Learn
η
λ
1e-06 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1e-05 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1e-04 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1e-03 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1e-02 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1e-01 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1e+00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1e+01 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1.0e-16 1.3e-14 1.7e-12 2.2e-10 2.8e-08 3.6e-06 4.6e-04 6.0e-02 7.7e+00 1.0e+03
0.10 0.05 0.00 −0.05 −0.10
Magnitude of 10^3


test MSE Scikit Learn
η
λ
1e-06 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1e-05 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1e-04 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1e-03 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1e-02 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1e-01 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1e+00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1e+01 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1.0e-16 1.3e-14 1.7e-12 2.2e-10 2.8e-08 3.6e-06 4.6e-04 6.0e-02 7.7e+00 1.0e+03
0.10 0.05 0.00 −0.05 −0.10
Magnitude of 10^3


train MSE own NN
η
λ
1e-06 85.3 85.3 85.3 85.3 85.3 85.3 85.3 85.3 85.4 85.4
1e-05 84.4 84.4 84.5 84.5 84.5 84.5 84.5 84.4 85.1 85.4
1e-04 71.8 71.7 71.7 71.8 71.8 71.8 71.8 71.8 74.8 85.4
1e-03 30.7 30.7 30.8 31.4 30.4 30.4 30.5 30.7 34.4 85.4
1e-02 12.3 13.0 12.5 12.4 11.9 12.3 12.6 13.2 25.0 85.4
1e-01 13.4 13.0 12.1 12.8 13.3 13.5 13.0 16.4 32.9 85.5
1e+00 77.1 61.0 70.4 87.2 57.1 39.3 44.7 85.9 85.6 84.9
1e+01
1.0e-16 1.3e-14 1.7e-12 2.2e-10 2.8e-08 3.6e-06 4.6e-04 6.0e-02 7.7e+00 1.0e+03
80 60 40 20
Magnitude of 10^3


test MSE own NN
η
λ
1e-06 85.4 85.5 85.6 85.4 85.4 85.6 85.4 85.4 85.4 85.4
1e-05 84.5 84.5 84.5 84.5 84.6 84.5 84.6 84.5 85.2 85.5
1e-04 72.1 71.8 71.8 71.9 71.9 71.9 71.8 72.0 75.0 85.5
1e-03 31.8 32.3 32.8 33.0 31.8 31.5 32.2 32.0 34.9 85.5
1e-02 20.7 20.4 21.5 19.9 19.5 19.6 20.7 20.9 26.8 85.5
1e-01 21.7 21.8 20.6 22.5 22.9 22.3 22.2 22.3 35.3 85.6
1e+00 76.2 63.5 71.7 87.1 59.1 41.2 45.2 85.8 85.8 84.8
1e+01
1.0e-16 1.3e-14 1.7e-12 2.2e-10 2.8e-08 3.6e-06 4.6e-04 6.0e-02 7.7e+00 1.0e+03
80 60 40 20
Magnitude of 10^3