

Report for Data Analysis CS5100: Coursework 1

4)

Train MSE	Learning Rate - train	Steps - train	Test MSE	Learning Rate - test	Steps - tests
0.0635	0.1	1000	0.0680	0.1	1000
0.08	0.01	2000	0.0932	0.01	2000
0.0587	0.2	1500	0.0604	0.2	1500
0.0565	0.5	3000	0.0568	0.5	3000
0.0565	0.7	3000	0.0566	0.7	3000
0.0567	0.1	10000	0.0572	0.1	10000

The training MSE appears to be lower than the test MSE in every case which is usually the case. However, the values are very close in each instance suggesting that data is not being overfitted.

6)

