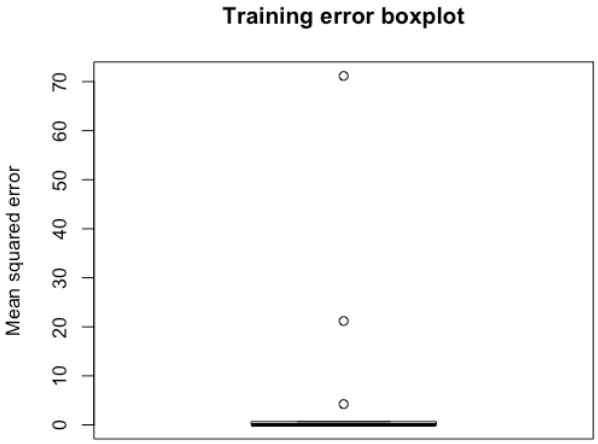
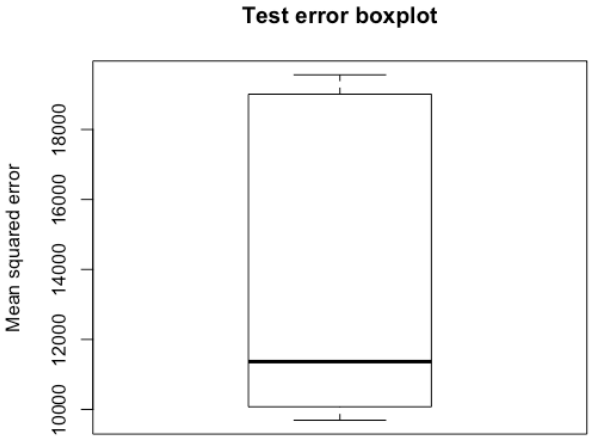
4b – Results

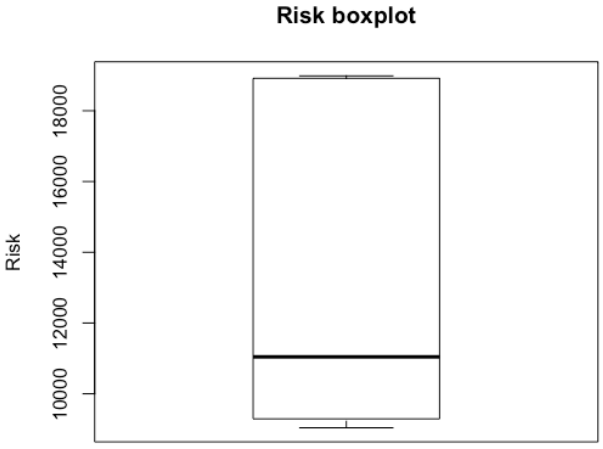
Conclusion: λ = 0.01 is best for training error, λ = 100 is best for both test error and risk.



	lambdas	train
0.01	1e-02	1.315341e-08
0.02	2e-02	5.281243e-08
0.05	5e-02	3.422364e-07
0.1	1e-01	1.309507e-06
0.2	2e-01	5.113539e-06
0.5	5e-01	3.015402e-05
1	1e+00	2.679842e-04
2	2e+00	2.467745e-03
5	5e+00	5.386157e-02
10	1e+01	6.591554e-01
20	2e+01	4.239270e+00
50	5e+01	2.118951e+01
100	1e+02	7.116816e+01



	lambdas	test
0.01	1e-02	19081.033
0.02	2e-02	18854.062
0.05	5e-02	19008.881
0.1	1e-01	19562.232
0.2	2e-01	19524.844
0.5	5e-01	12979.588
1	1e+00	11366.365
2	2e+00	10892.147
5	5e+00	10453.607
10	1e+01	10075.235
20	2e+01	9744.496
50	5e+01	9879.129
100	1e+02	9690.973



	lambdas	risk
0.01	1e-02	18986.554
0.02	2e-02	18965.930
0.05	5e-02	18957.681
0.1	1e-01	18917.739
0.2	2e-01	18821.363
0.5	5e-01	13073.451
1	1e+00	11043.214
2	2e+00	10231.056
5	5e+00	9600.698
10	1e+01	9291.002
20	2e+01	9102.168
50	5e+01	9043.326
100	1e+02	9038.766