Problem Set 9

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Question 5:
The dimension is 404 450

Question 6:
optimal value of lambda: 0.0362
in-sample RMSE: 0.1864
out-of-sample RMSE: 0.2153

Question 7:
optimal value of lambda: 0.12
in-sample RMSE: 0.1591
out-of-sample RMSE: 0.1662

Question 8:
optimal value of lambda: 0.109
in-sample RMSE: 0.1801
out-of-sample RMSE: 0.1978
Given the value of alpha Ridge would be a better strategy. The in sample
RMSE value is lowest in Ridge, variance is low so we can interpret that Ridge
has better prediction power.