

# PS9<sub>glass</sub>

d.glass

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**What is the dimension of your training data (housing\_train)?**

$\dim(\text{housing\_train})[1] 404 \times 14$

**How many more X variables do you have than in the original housing data?**

$\dim(\text{housing})[1] 506 \times 14$

**What is the optimal value of  $\lambda$ ?**

The optimal value of  $\lambda$  is approximately 0.000869.

**What is the in-sample RMSE?**

0.4083527

**What is the out-of-sample RMSE (i.e. the RMSE in the test data)?**

0.3897754

**Optimal value of  $\lambda$  (Ridge Regression)**

Approximately 0.0233

**Out of sample RMSE (Ridge Regression)**

1.95