**1. Ridge Regression**

Use the Carseats dataset (from the ISLR package) to answer the following. Fit a Ridge regression

model to predict Sales using all predictors. For this problem, split your dataset randomly into a

training data (300 observations) and testing data (the remaining observations).

1. What is the value of best lambda?
   1. Best Lambda = 0.133299
2. What is the MSE for the model associated with the best lambda?
   1. MSE = 1.051356
3. Report the coefficients estimates for all predictors
   1. (Intercept) 6.5152464020
   2. CompPrice 0.0797750959
   3. Income 0.0136299406
   4. Advertising 0.1084101064
   5. Population 0.0005611384
   6. Price -0.0876011274
   7. ShelveLocGood 4.4310655144
   8. ShelveLocMedium 1.6996332251
   9. Age -0.0420530107
   10. Education -0.0251443051
   11. UrbanYes 0.1344742601
   12. USYes -0.0166474957

**2. LASSO Regression**

Use the Carseats dataset (from the ISLR package) to answer the following. Fit a LASSO regression

model to predict Sales using all predictors. For this problem, split your dataset randomly into a

training data (300 observations) and testing data (the remaining observations).

1. What is the value of best lambda?
   1. 0.003459142
2. What is the MSE for the model associated with the best lambda?
   1. 1.011589
3. Report the coefficients estimates for all predictors
   1. (Intercept) 5.7968546350
   2. CompPrice 0.0920078418
   3. Income 0.0144138703
   4. Advertising 0.1144482888
   5. Population 0.0006466457
   6. Price -0.0968238868
   7. ShelveLocGood 4.8646367422
   8. ShelveLocMedium 1.9861397022
   9. Age -0.0445560877
   10. Education -0.0210980204
   11. UrbanYes 0.1528498637
   12. USYes -0.0852528737