

Homework #2

Due date 2/27/2019

NOTE: You may form a study group to work on homework problems. However, each student must submit solutions to the homework problems in your own words, demonstrating your own understanding of the problems.

1. Ch.3: Page 125 #14
2. Referring to the Body fat data on *beachboard*, find the optimal model to predict percent body fat using:
 - Age (years)
 - Weight (lbs)
 - Height (inches)
 - Neck circumference (cm)
 - Chest circumference (cm)
 - Abdomen circumference (cm)
 - Hip circumference (cm)
 - Thigh circumference (cm)
 - Knee circumference (cm)
 - Ankle circumference (cm)
 - Biceps (extended) circumference (cm)
 - Forearm circumference (cm)
 - Wrist circumference (cm)

Hint: model selection: VIF , C_p , AIC , BIC , $Adjusted R^2$, $RMSE$