

STATS 500 - Homework 4

Due in class October 31

For the `longley` data, fit a model with `Employed` as the response and the other variables as predictors.

1. Compute and comment on the condition numbers.
2. Compute and comment on the correlations between the predictors.
3. Compute and comment on the variance inflation factors.
4. Choose a reduced set of predictors that does not exhibit as much collinearity as the full set, fit a new linear model with this reduced set, and comment on the differences between the reduced model and the full model.

Solutions to this homework should not exceed 3 pages.