STAT675 – Homework 1b
Due: Sept. 17

1. Looking at included code `polynomial.R`, examine the bias/variance trade off for varying number of data points n.

2. Use the included design matrix $\mathbb{X}$ and response Y (in `homework1_X.Rdata` and `homework1_Y.Rdata`, respectively) to do the following:

   (a) Predict the response associated with `homework1_Xtest.Rdata`. Try to make your prediction error as low as you can

   $$\text{prediction error} = ||\mathbb{X}_{test}\hat{\beta} - Y_{test}||_2^2$$

   (b) Report which of the original covariates seem to be the most important.