STAT 485/685

Assignment 6

1. Text, page 174, 7.27.

2. Text, page 174, 7.28.

3. For the series `co2` delete the last 12 values. Use `lm` to fit a linear plus quadratic plus seasonal trend. Get the residuals. Then examine the acf, pact, and eacf and select a model to fit. Now fit that model to the original data set using the `xreg =` argument to include time, time squared and season in the model.

4. Now use `forecast` in the forecast library to forecast the last 12 values. Compare these forecasts to the forecasts you would get if you just used the linear model to make predictions. And compare them to the actual values in the co2 series. Compare the forecast standard errors to the sd of the residuals in the `lm` fit.