

### Homework 3

1. Consider the monthly US unemployment rate from January 1948 to November 2011 in the file `data_hw3.txt`. The data are seasonally adjusted.
  - (a) Does the monthly unemployment rate have a unit root? Why?
  - (b) Build a time series model for the monthly unemployment rates. Check the fitted model for adequacy. Then, use the model to forecast the unemployment rate for the December 2011 and the first three months of 2012.