

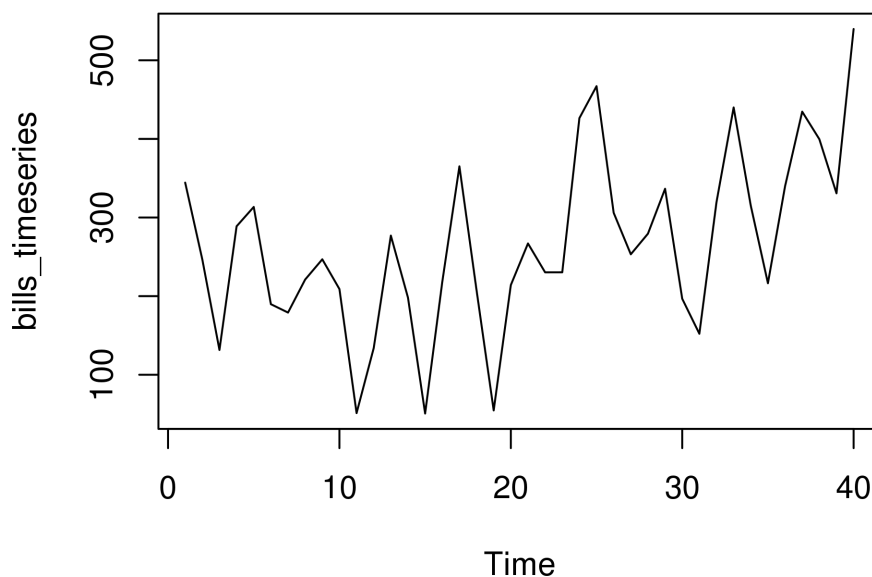
Homework Assignment 10

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November 14, 2015

Problem 1. Plot the energy bills versus time. What kind of trend appears to exist? What type of seasonal variation appears to exist? Is a transformation needed to obtain a series that displays constant variation?

Solution. See below for a plot of the bills time series data:



It is clear from the plot that there is both a trend and season variation present in the data so a transformation is needed to obtain residuals the represent a stationary time series. \square