Project Task **Due: April 15, 2016**

Your project uses the data in the project2016.xls, which contains time series data. The table below shows the project group and dataset.

Topic	**Group**
Annual Industrial Production Index	2
Total Number Of Water Consumers	3
Annual Swedish Fertility Rates	4
Annual Velocity Of Money	5
Monthly Percentage Changes In Canadian Wages & Salaries	6
Monthly New York City Births	7
Monthly Precipitation In London	8
Monthly Railroad Bond Yield	9
Personal Savings As A Percentage Of Disposal Income	10
Scholes Index For New York Stock Exchange	11

Instruction

Open the spreadsheet, select your dataset and read it into R

(i). Produce a time series plot of your data and comment. **[5]**

(ii). Fit a set of models for your data, and select the best fitting model, saying why you chose this model as the best fitting model. **[8]**

(iii). Produce diagnostic plots for your models and comment **[5]**

(iv). Write down the mathematical equation of your chosen model **[3]**

(v). Produce a 3 step ahead forecast with prediction interval. **[3]**