Resume:  
For this individual coursework (2000 words), you are required to use the utility data, which is a set of time series data covering 5 years (in the Excel document attached). Please, include homemade (own, created by you) graphs and charts using Excel to explain the theory needed. This assignment about Time Series Data for Utilities is based on the fuel thematic (you can give examples with fuel companies in the UK to apply the theory and data required through graphs and charts).  
  
Steps:  
1. Experiment with different forecasting models and decide on the most appropriate time series model for your data;   
2. Use your model to forecast the four quarterly figures for the year following the end of your data;   
3. Compare your forecasts with the actual figures for that year, which you will have been given.  
4. Investigate and give a brief explanation of how clustering could be used as a part of your time series analysis;  
5. Write a well-structured report of your findings (with Introduction, Main Body/ Discussion, Conclusion, References and Appendix).  
  
The marking scheme is as follows:  
- Report structure and presentation - 10%  
 Introduction to the data - 10%  
- Time series analysis - 30%  
 Forecasts - 20%  
- Critical explanation of using clustering as part of time series analysis - 20%  
- Copies of the two models in appendix of report - 10%  
  
Criteria:  
- The work submitted shows an excellent level of understanding and application of time series modelling with accurate forecast for the four quarterly figures;  
 In addition, there will be an excellent critical explanation of using clustering as part of time series analysis;  
- Copies of the two models have been included in the appendix of the report;  
 The assignment must be written in a professional, clear, well-structured and coherent style.  
  
Requirements:  
- Critically apply business analytical skills in business cases;  
 Critically apply and interpret the outputs of data mining models and forecasting results for end-users;  
- Solve managerial problems and make systematic decisions by applying business data analysis techniques.