Benovymed Healthcare

Difficulty Level : Easy

Marks : 70

Q1 -

Data Description: Petrol data from Jan 2001 to Sep 2013.

Context:

Forecasting using the given data

Attribute Information:

- Year
- Quarter
- Consumption

Objective:

- Use Single Exponential Smoothing method to forecast sales using the test data. - 12 marks
- Calculate the values of RMSE and MAPE for each learning rate case - 10 marks
- Plot the train and test data with ratio 70:30 split. - 8 marks
- Plot the forecasted values along with original values - 15 marks
    - with learning rate = 0.1
    - with learning rate = 0.5
    - with learning rate = 0.99
    - with optimal value of learning decided by model itself
- Build the Holt Winter's linear method with additive errors model to forecast sales for the test data and Print the Holt-Winters Additive parameters - 10 marks
- Calculate the values of RMSE and MAPE with respect to Holt Winter's linear method and Plot the forecasted values along with original values. - 15 marks

Apply all the necessary steps for forecasting using the data. Explain the necessary steps with comments in Jupyter notebook

Data Source :

Get the Data from the Q1 folder with name : Petrol for building the forecasting model.
