Case Study: T101

# Time Series Analysis and Forecasting Case study

# Business objective:

Analyze the historical stock prices. Build a model on the stock prices. Forecast the future values of the stock using the time series model

### Data

Download 3 years original weekly stock price for any stock. Here is a link to pull Google stock price data

https://in.finance.yahoo.com/q/hp?s=GOOG&a=00&b=27&c=2012&d=00&e=30&f=2015&g=w

Below is the link for google last one year weekly stock prices data.

https://drive.google.com/file/d/0B7Zo00OSj1W6UkNaeTRqaVBjQ2c/view?usp=sharing

# Analysis Approach

- Use Adj Close as stock price
- Clean the data, if required
- Use ARIMA technique
- Use 90% of data for model building and 10% for validation
- Final observations and inferences
- Documentation of the approach, codes and results

### Discussion forum

- Facebook:
  - https://www.facebook.com/pages/Practical-Business-Analytics-Using-SAS-A-Handson-Guide/1539167863021194
  - o <a href="https://www.facebook.com/groups/PracticalBusinessAnalytics/">https://www.facebook.com/groups/PracticalBusinessAnalytics/</a>
- Blog:
  - http://practicalbusinessanalytics.blogspot.in
- Slide share
  - o http://www.slideshare.net/21\_venkat

## References:

- Chapter-12: Time Series Analysis and Forecasting from the book Practical Business Analytics
  Using SAS: A Hands-on Guide <a href="http://www.amazon.com/Practical-Business-Analytics-Using-Hands/dp/1484200446">http://www.amazon.com/Practical-Business-Analytics-Using-Hands/dp/1484200446</a>
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