

Assignment - Stock Market Analysis

Key observations and summary

As the stock data has been provided for 3.5 years span, it proved beneficial in analyzing trend like in case of real market analysis. For the purpose of this data analysis, I have used 20 & 50 day moving average, which has further helped in generating buy/sell/hold signals. The changes in buy/sell signals for 6 different companies were computed using SQL. The logic maintained in generating signals is – use of LAG() function that allows to look back a number of rows and access data of that row from the current row. Creation of user defined function which takes date as input and returns signal as output has been a great help in analyzing data from different aspects.

Below is a brief overview of data analyzed via SQL -

Company	Buy signal	Sell signal
Bajaj Auto	12	11
Eicher Motors	6	7
Hero Moto Corp	9	9
Infosys	9	9
TCS	12	13
TVS Motors	8	8

It can be summarized that by using moving average and LAG windowing function, stock analysis can be done with enhanced accuracy and less time.