Assignment – Stock Market Analysis

Executive Summary

5. Write a brief summary of the results obtained and what inferences you can draw from the analysis performed.

The Stock price data provided is from 1-Jan-2015 to 31-July-2018 for six stocks Eicher Motors, Hero, Bajaj Auto, TVS Motors, Infosys and TCS.   The dataset provided here has been extracted from the NSE website. As a result, the data for that date can be missing and/or unreliable.   For example, daily trading day data are provided for all six stocks, except on 31-August-2017 for Bajaj and Infosys, 09-December-2015 for TCS, TVS, Eicher and Hero which did not have its data updated by NSE yet. Since these data are issued by stock markets, data is only available on days that the stock market is open for trading, which excludes weekend days and about ten holidays per year.

Moving Average (MA) is a running average of the last set of values in a time series. If you are computing a twenty/fifty-period moving average, then it is the average of the last twenty/fifty periods of time series data. One distinguishing feature of this kind of moving average is that you cannot have an arithmetic moving average value until enough periods are available to compute the first moving average. Therefore, you cannot compute a twenty/fifty-period moving average until values for twenty/fifty periods become available.

Given some historical Close price data for a collection of stocks, you can compute and interpret technical indicators/Signal for the stocks. Any reasonably comprehensive list of technical indicators/Signal is going to be very long. When the 20 days moving average crosses above the 50 days moving average, it is a signal to BUY, as it indicates that the trend is shifting up. This is known as a Golden Cross. On the opposite when the 20 days moving average crosses below the 50 days moving average, it is a signal to SELL, as it indicates the trend is shifting down. It is sometimes referred to as the Death Cross. A primary goal of this tip is to present a handful of technical indicators/Signals that can be computed and/or used via SQL applications.