

# Assignment – Stock Market Analysis Summary & Inferences

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The 20 Day and 50 Day moving averages were determined for 6 stocks. The objective was to determine the buy and sell signals based on the crossover of the 20 Day moving average with the 50 Day moving average.

If we query or plot the 20 Day and 50 Day moving averages for the Bajaj Auto stock we can see that there is a high probability of success if we base our decision making based on the following criteria:

1. Golden Cross: Whenever the 20 Day MA is crossing from below to over the 50 Day MA the probability of the stock price going up is high and is a good Buy Signal for the trader or investor.

*Few Buy Signals as indicated in the graph:*

*18-05-2015, 19-10-2015, 04-Apr-2016, 17-Jan-2017, 07-08-2017, 22-06-2018 and others*

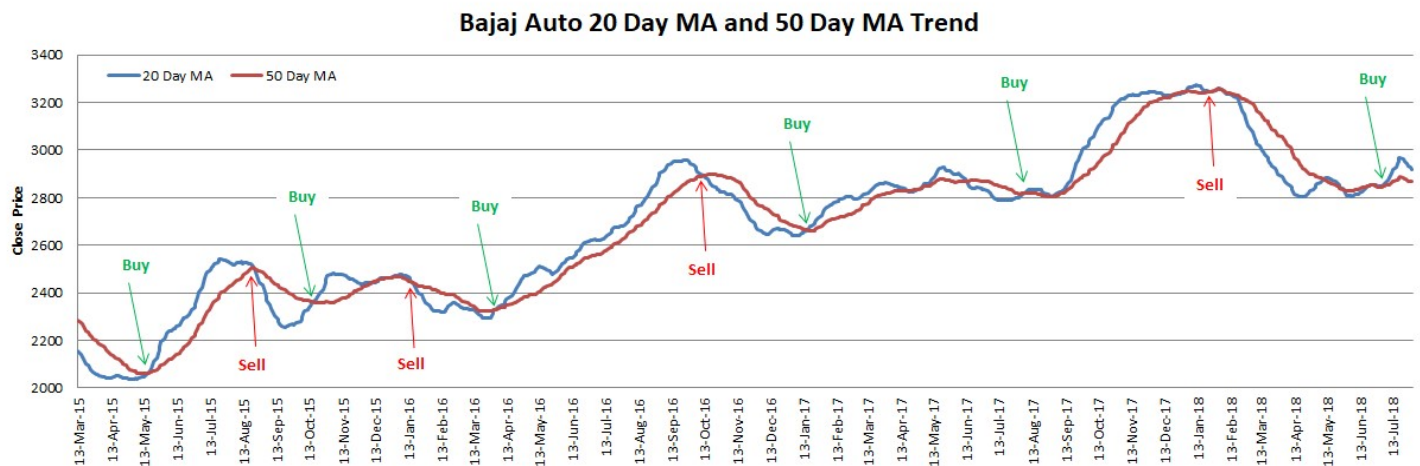
2. Death Cross: Whenever the 20 Day MA is crossing the 50 Day MA from above to below the probability of the stock price going down is high and hence a good Sell Signal for the trader or investor.

*Few Sell Signals as indicated in the graph:*

*24-Aug-2015, 18-Jan-2016, 14-10-2016, 13-06-2017, 06-02-2018 and others*

3. Hold: For durations when there is no crossover of the 20 Day MA with the 50 Day MA it's best to hold and not take any action. It's best to wait for the indicator.

➔ *The trend reversals typically occur at the cross over of 20 Day MA and 50 Day MA*



By creating these tables for the stocks and also by creating the function `getSignal()`, a trader or investor will be assisted to enter the date and get the signal (Buy, Sell and Hold) and then take action accordingly. It will also help in understanding the past trends on crossover of these moving averages and help take intelligent decisions while trading or investing.