"STOCK MARKET TRENDS USING DATA MINING"

Presented by

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Background

- Data source: nyse.com
- Data ranged from 1990 2010
- Sampled data from Forty-one (41) companies starting with work K.
- Too much data (120,000 for this much only)
- Data kept and used in .csv format for Tableau and .csv for WEKA.

What Questions we had related to Stocks

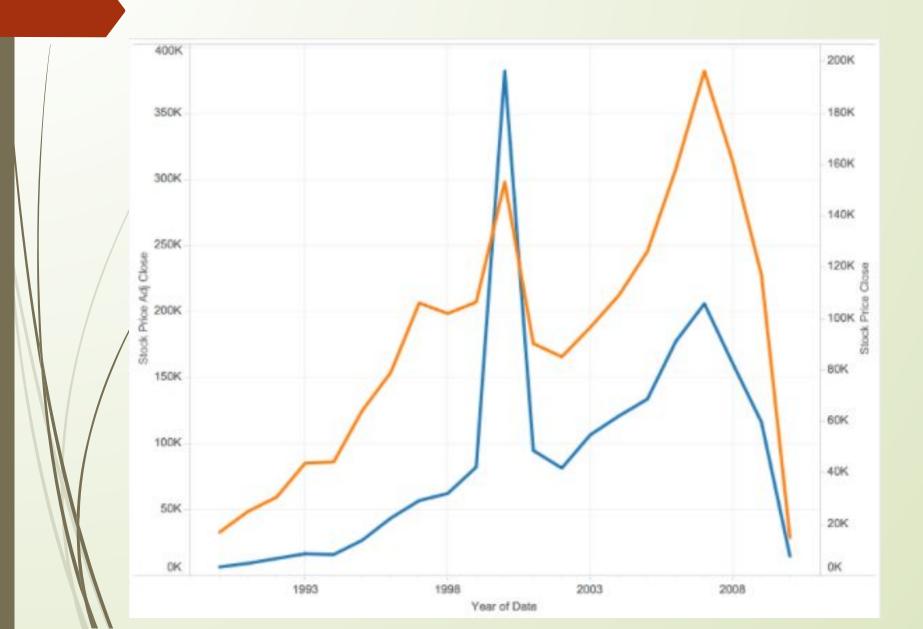
- Finding how the price of the stocks change?
- Difference between the Adjusted Stock Price and Close Price
- Difference between the Opening and Closing Price of Stocks
- Difference between the Highest and Lowest Price of Stocks
- Difference in volumes of stocks based on the price of stock.
- What happened during the 2008 recession?
- Highest Gainer (Stock)?

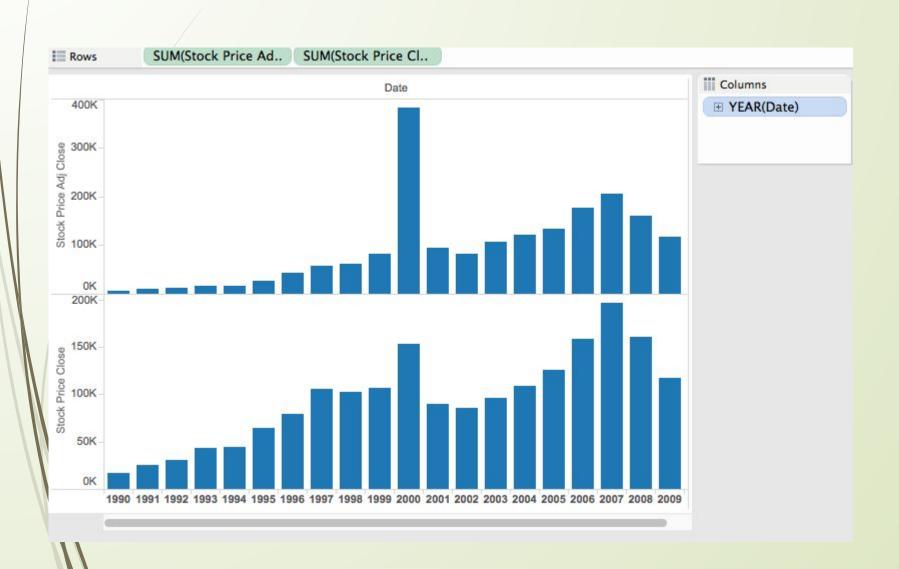
Analysis between the Adjusted Stock Price and Close Price

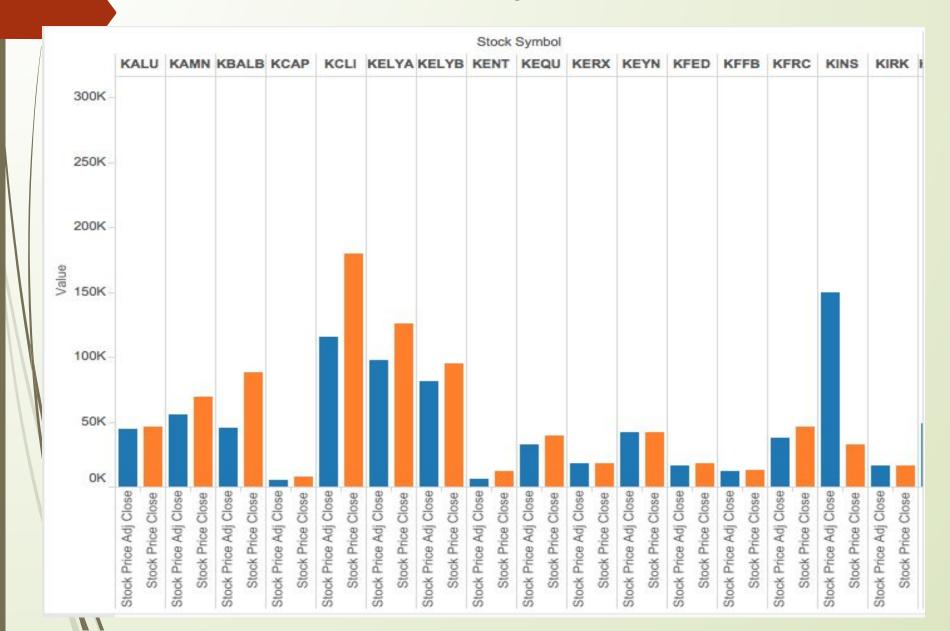
Close Price is simply the closing price of the stock on that day

What is Adjusted Stock Price?

It is the closing price of the stock based on rumors that comes from different companies.





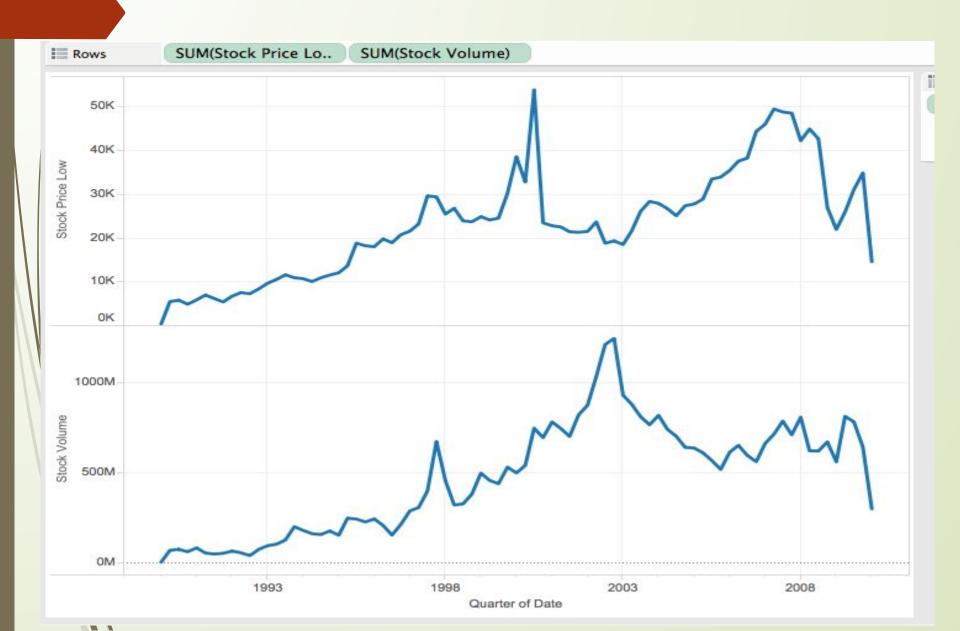


- The difference between adjusted close stock price and close price narrowing by years.
- Now the difference is really small, few factors can be:
 - Companies being Smart by hiring people to avoid this situation
 - Share market people having better links to get the correct information.

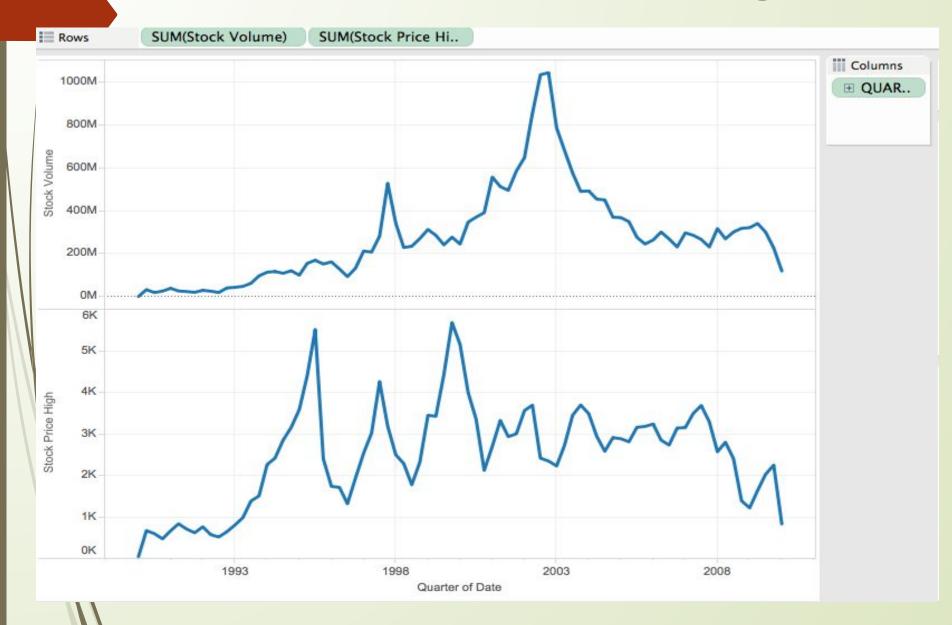
Difference in volumes of stocks based on the price of stock.

It is the difference between volume of stocks when the prices are low or when the prices are high.

When the Stock Prices are Low?



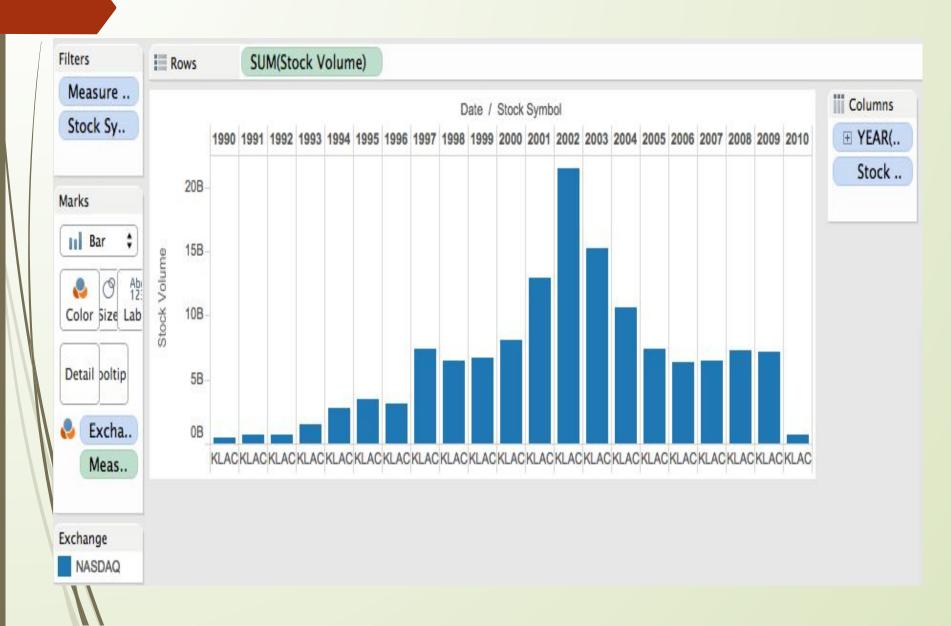
When the Stock Prices are High?



Difference between the Highest and Lowest Price of Stocks

Highest Gainer

- KLA-Tencor Corporation (KLAC) was the highest gainer and by a margin.
- It is a semiconductor and nanoelectronics related manufacturing company based in Milpitas, California.
- The Stock prices went from 8\$ to 88\$ high, (currently around 70\$)











Quiz 1?

Which of the following clustering algorithms when implemented on a large dataset gives the solutions faster?

- a) K-Means
- b) EM Algorithm