

Members:

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Modifications:

After realizing the massive scope of the task we had undertaken we decided not to pursue the sports aspect of our project. Additionally, we were worried about the lack of reliable data and whether or not the data would even be meaningfully correlated with stock prices.

Here are the updated questions

1. Find all the dates we have information on
2. Find the weather on a day
3. Given a season and a year, find the best performing stocks
4. Given a season and year, find the best performing sectors
5. Given a company symbol and whether it rained, find the stock stats
6. Given a sector name and whether it rained, find the sector stats
7. For a sector, find the most stable stock in that sector
8. Find the stocks with the highest percent growth on days like...
9. Find the sectors with the highest percent growth on days like...
10. Given a stock, find the temp ranges that had the highest percent growth
11. For all sectors, find the temp ranges that had the highest percent growth
12. Given a stock, find the busiest trading month
13. For all sectors, find the busiest trading month
14. For a given month, find the stocks with the highest percent growth on days like...
15. For a given month, find the sectors with the highest percent growth on days like...

Process:

There was only one change to the data cleaning from part C. We discovered a junk trade with the symbol 269009 which didn't make any sense. So we deleted that in the setup.sql

Successes:

So many things other than weather go into a stocks price on a given day so finding meaningful correlation was understandably difficult. Thus we did our best to show the most prevalent correlations in the data, despite them not being super telling. Another difficult part was writing the query to correlate rainfall with a sector as this involved taking in user input, combining all tables except one together in the right order, and then very involved debugging to figure it out when it did not work.

Known Issues:

We succeeded in doing what we wanted with the data we had. The only limitation is that the user has to manually input the company symbol as that is something we could not offer a menu for as there are too many. If the user puts in the wrong company symbol, they might not get the information he is looking for.

Extensions:

In the future we could implement something to determine if the results are statistically significant. We could also make a better UI that allows the user to create simple but novel queries on their own and select data that is meaningful to them. It could be as simple as changing what we order the data by. Another feature we could add would be getting the current location of our user and using weather data from their location. More weather data would have been interesting. We only had temperature and precipitation but things like humidity, atypical seasonal temperatures, and cloudiness would have been interesting to look at. Additionally, more weather data from different places would have expanded the capabilities of our database.