

4 HW #1A: Basic SQL Querying

The following questions utilize the financial data in the s2010, s2011 and fnd tables. Before beginning the assignment, *please read the data dictionary to better understand the data*. When doing so, keep an eye on data types for different columns as well as table organization.

- If no table information is given, use the 2010 data.
- If the query returns a significant number of rows, please only copy a few rows in your response.
- For those queries which require specifying a date, please use the format 'YYYY-MM-DD' (as in '2010-01-11'), making sure to use single quotes around the date itself.

The best approach to learning from these problems is to complete them using pen and paper, working by yourself and then using your group to double check your results. The First Five problems provide a short overview of the core concepts in the assignment, so make sure that you understand them. The Main Problems section contains questions which range from easy to very difficult. Remember to don't get stuck! If a problem is taking a long time or is too difficult, *use your group!*

First Five

Using the 2010 stocks data, write a query that returns the following.

1. All rows and columns relating to AAPL.
2. The date, open and closing price for AAPL on the 7th of January in 2010.
3. Write a query which returns the stock symbol, the date, the open and close price for the top five open prices in 2010 for stocks on the New York Stock Exchange (NYSE).
4. The days when AAPL has a volume more than 20 million and where the high is great than 45 dollars (2010 data)
5. Write a query which returns 3 columns: the return date, stock symbol and volume, but only for stocks that have a volume larger than 200 million in 2010.

Main Problems

1. Write a query which returns all information about about Google (GOOG), NetFlix (NFLX), Amazon (AMZN) and Microsoft (MSFT) in 2010.
2. Consider stocks on the NYSE which had a volume of more than 1 million. Which stocks (symbol and date) had their open price the same as their low and their closing price the same as their high (2010 data). Order them by symbol alphabetically.
3. Consider stocks on the NYSE in 2010 which had a volume of more than 1 million. Which stocks (symbol and date) had their closing price the same as their low and their opening price the same as their high? Sort them by reverse chronological order.
4. Consider stocks on the NYSE in 2010 which had a volume of more than 1 million. Of those days which a stock had either (a) open = low and close = high or (b) open = high and close = low, which symbol and date has the largest volume traded?
5. Which company (ticker symbol) had the highest net income over all the years that are in the FND table?
6. Which company (ticker symbol) had the highest net income in fiscal year 2011 (use the FND table)?

7. Which company (ticker symbol) had the lowest positive net income over all years (use the FND table)?
8. Which company (ticker symbol), which had a net-income per employee over \$1,000, had the largest number of employees (over all years)? Keep units in mind (use the FND table)!
9. Which company (ticker symbol) had the lowest, positive, non-zero, net income in fiscal year 2011 (use the FND table)?
10. Of the companies which had more than 1,000 employees in 2011 which had the highest net income per employee in 2011 (use the FND table)?

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