# 2   HW #2: Subqueries

Answer the following questions using only the syntax discussed in class. If a year is unspecified, please use the 2010 data and refer to the data dictionary for questions regarding the contents of the data.

For each question, please provide both the query and the first few lines of output.

1. Answer the following questions using the daily stock data.

   (a) Return a list of all the trading days in 2010.

   (b) The cusip with the lowest Jan 11th volume that also appears on Dec 1st.

   (c) The lowest five cusips by volume from Janaury 11th, 2010 that have a volume between 1 and 10 million on December 1st, 2011.

   (d) Return the list of permco's that exist in 2011, but not 2010.

   (e) Of the permco's that existed in 2011, but not in 2010, which had the highest dollar volume traded day in 2010?

   (f) Return a list of the distinct cusips that were in the top 50 highest dollar value traded in 2011.

   (g) Of the cusips that were in the top 50 highest dollar value traded in 2011, which were also in the top 100 highest value traded in 2010?

   (h) Which permcos were in the top 500 of dollar trading volume on the 2nd, 3rd and 4th days of February 2011?

   (i) Of the permcos that had volume between 100,000 and 1,000,000 on the 2nd and 3rd of February 2011, which had volume greater than 5,000,000 on the 4th on February?

2. Answer the following questions using the fnd table

   (a) Of the stocks (ticker symbols) that have a net income to employee ratio greater than $1,000 in fiscal year 2010, which have a net income between 20 and 30 million dollars in 2011?

   (b) Of the stocks (ticker symbols) that have a net income to revenue ratio (called a profit margin) greater than 20%, which have more than 25,000 employees in fiscal year 2011?

   (c) Of the stocks (ticker symbol) that have profit margin greater than 20% in 2010, which had a profit margin greater than 30% in fiscal year 2011?

(d) Of the stocks (ticker symbols) that have a net-income to employee ratio greater than $1,000 in fiscal year 2010 and more than 1,000 employees in 2011, what is the highest profit margin in fiscal year 2011 and what is the ticker symbol?

(e) Of the stocks (ticker symbols) that have a net-income to employee ratio greater than $1,000 in fiscal year 2010 and more than 1,000 employees in 2011, what is the lowest profit margin in fiscal year 2011?

(f) Of the stocks (ticker symbols) that have a net-income to employee ratio greater than $1,000 in fiscal year 2010 and between 1,000 and 2,000 employees in 2011, what is the highest profit margin in fiscal year 2011 and what is the ticker symbol?

(g) We define revenue divided by inventory as the turnover. It expresses how many times the inventory has turned-over during the year in the form of sales. For companies (ticker symbols) with revenue between 1 and 2 million dollars in 2010, what company has the highest turnover in 2011?

(h) Of the companies (ticker symbols) with turnover between 1 and 2 in 2010, which companies also had a net income to employee ratio greater than $1,000 in 2010?

(i) Of the companies (ticker symbols) with turnover between 1 and 2 in 2010, which companies also had a net income to employee ratio greater than $1,000 in 2011?

(j) Which companies (company name), in fiscal year 2010 had a profit margin greater than 20%, turnover more than 2 and more than 10,000 employees?

3. For each of the questions below, please write a single query which generates a dataset with the specified columns.[3]

(a) Write a select statement to generate the following datasets:

- company name, ticker symbol, revenue, inventory and employee information from fiscal year 2010

- A column called turnflag which is 1 for companies with turnover greater than 2, 0 otherwise

- For a company to be included it must have revenue, inventory and employee all greater than zero for both 2010 and 2011

(b) Write a select statement to generate the following datasets:

- company name, ticker symbol, revenue, inventory and employee information from both fiscal years

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[3]Some of these requests maybe large. When testing, use limits to avoid waiting.

- A column called invtflag which is equal to 1 for companies with turnover between 2 and 3, 2 for turnover between 3 and 4 and 5 for turnover greater than 4 and zero otherwise.

- A column called invtProfit which is equal to 1 for companies with less than 20% profit margin and turnover greater than 2, 2 for companies with profit margin greater than 40% and turnover greater than 2 and 0 otherwise.

- A column called EmployeeProfit which is equal to 0 for companies that have profit margins between 20% and 40% and have more than 10,000 employees, is equal to a company's profit margin if the margin is less than 20%, is equal to twice the number of employees (if it exists) if the profit margin is greater than 40% and is -1 otherwise.