

**CS1100 Introduction to Computer Science with Applications**  
**Lab A2**  
**Fall 2009**

Concepts for this lab:

- Aggregate functions (especially count and sum)
- Calculated fields
- How selection criteria work with aggregate functions and with “where”
- Functional dependencies and the number of rows resulting from a join
- Queries using subqueries
- What is a line item, what is the total cost of a line item, what is the total cost of an order

For each problem you are given an English question. Your job is to figure out how to ask the database the English question using a query or multiple queries. The answer that a query gives will depend upon the data within the database. You should write the query so that it gives the correct answer regardless of what data is in the database. The answers for “who” questions should include first name, last name and contactID and should not include duplicates.

- 1) How many contacts are there from each state?
- 2) How many contacts are there who placed at least one order, broken down by state?
- 3) How many orders are there which include a line item (order detail) for more than \$1000?
- 4) How many orders are there which have a total value of more than \$1000?
- 5) How many contacts placed an order which included a line item for more than \$1000?
- 6) How many contacts placed an order which had a total value of more than \$1000?
- 7) How many contacts are there who ordered a combined total for all of their orders, of more than \$1000 of merchandise
- 8) Who spent the most money on all of the monitors they ordered?
- 9) What is the average cost of an order?
- 10) For each state from which an order was placed, what is the average cost of an order broken down by state?