

# msj cis 310 Project 3

: Where's my data?

:: Due April 22

## I Data Entry Problems

All the tables have been created and the owner of Schoolkids is very happy with your progress so far. There have been some problems with entering the data from the old system into your new database though. It appears the transcriber made quite a few mistakes for data entry. Write queries to do the following actions:

- The keys were sticking at the time of entry, so all customers with the last name of Smith might have had their name entered as SSmith, SSSmith or SSSSmith. Correct these entries so they all are Smith. This must be done with a single query, not three separate ones.
- The city of Carrboro was incorrectly entered and had random junk characters after the city name. Update all instances so they read Carrboro. Examples could be Carrboro41JK, CarrboroX, Carrboro!@j34k, etc.
- Some customers that were brought into the system should not have been. Any customer with an id less than 30 should be deleted. Additionally, all customers with a state of HI or AK should be deleted because Schoolkids will no longer ship outside the continental US. All of these deletions should be in one query.
- Some order lines were created that have no order associated with them. These are invalid order lines and should be deleted. Note that these lines are identified by having NULL for their foreign key on the order ID.
- A backup of the Customer table needs to be made. Write a query or series of queries to create a copy of the Customer table called Customer\_Backup.
- For the backup we don't care about the optout status so we can save space by deleting it. Write a query to delete this column from Customer\_Backup.
- Turns out some customers have really long addresses. Write a query to make the column handle strings up to 1000 characters long in the regular Customers table (not the backup).
- Employees have a commission rate based on their years of experience. Add a column for this commission rate to the Employee table using a query.

## II Reporting

With the system up and running it looks like management would like to be able to run some rudimentary reports while the system is still being polished. Write queries to extract the necessary data, one per bullet point.

- Give the customer name, state, phone, and email for all customers and in alphabetical order.
- Get the most expensive item sold, cheapest item sold, and the average price of all items.
- The crazy manager really loves Patty Griffin so write a query that tells how many different Patty Griffin albums there are.
- Write a query that gives the artist name and album title of all albums with the number of tracks over 15.

# III Submission

Put your database file and the text file with the SQL commands inside of a zip file and e-mail it to me at [alex\\_kuhl@msj.edu](mailto:alex_kuhl@msj.edu).