Self Serve Data Warehouse Queries

Introduction

The goal of this lab is to give you the opportunity to refresh your SQL skills in the context of a data warehouse.

Getting Started

A schema reflecting the logical structure of the data warehouse can be found under the course Blackboard item *Labs/Self-Serve Data Warehouse Queries*. Download the ZIP file containing the DW, extract the contents, and attach the DW database. Open and examine the DW data warehouse schema PDF file located with the lab Blackboard item. Trace through several of the relationships – especially those involving sales, customers, products, and dates and times. **What "role" does the table FactStoreSales perform between any two dimensions – lets say customers and products?** Hint: consider that customers may purchase many products and a product may be purchased by many different customers.

Believe it or not (or should I say like it or not), the most frequently used tool for self-service access to the data in a data warehouse is good-ole SQL. The following questions require you to write SQL queries against the data warehouse database. Author your queries using the Microsoft SQL Server Management Studio. Alternatively, you may author your queries using **Notepad** and execute your queries using **sqlcmd.exe** from a command prompt.

Query 1

The VP of marketing is thinking of purchasing some regional banner ads on Google. **What are the top 10 zip codes where have we achieved the most sales in dollars?** The *Price* attribute contains the selling price for each fact. The *OrderQty* attribute contains the number of items products sold for each sales measurement event.

SELECT CLAUSE:

```
SELECT sum of sales amount, postal codes
ORDER BY 1 descending
```

CHECKSUM: **1712635709**

Query 2

Which 10 zip codes have experienced the greatest percentage increase in sales between 2010 and 2012? Use the *CalendarYear* attribute to determine sales year. For such a simple question, this second query is a bit of a challenge.

SELECT CLAUSE COLUMN ORDER:

```
SELECT % Increase, postal codes
ORDER BY 1 descending
```

CHECKSUM: **751305817**