

## Using Functions, Subqueries, and ROLAP in SQL Queries

### **Physical Table Design of Sale\_Co\_DW.db, QC\_Checks.db, or Company.db**

This physical table structure for the three SQLite databases may be obtained via DBBrowser for SQLite or via .schema dot command in sqlite3.exe.

Sale\_Co\_DW.db is more of a data warehouse design having fact tables and dimension tables.

QC\_Checks.db contains quality check errors from the case study reviewed during Week 05.

Company.db contains company data used to illustrate subqueries in Classwork 6.2.

### **Exercise:**

- 1) Use any of the three databases above to complete each subsection in step 2. Do not use any of the subqueries illustrated in Classwork 6.1 or Classwork 6.2.
- 2) Create five unique, executable queries (2 points), using a minimum of four functions on average ( 2 points), having multiple grouping indexes (2 points), and :
  - a. A Type I subquery (2 points) nested with two inner queries (2 points).
  - b. A Type II subquery (2 points) nested with two inner queries (2 points).
  - c. A Type III correlated subquery (2 points).
  - d. The SELECT projection from a table created by a SELECT statement (2 points) with 5 columns.
  - e. The SELECT projection from tables saved to a CSV file (2 points).
- 3) Submit to Canvas Assignment in one PDF document:
  - a. Your SQL scripts for each query.
  - b. Legible output projection from running each query.