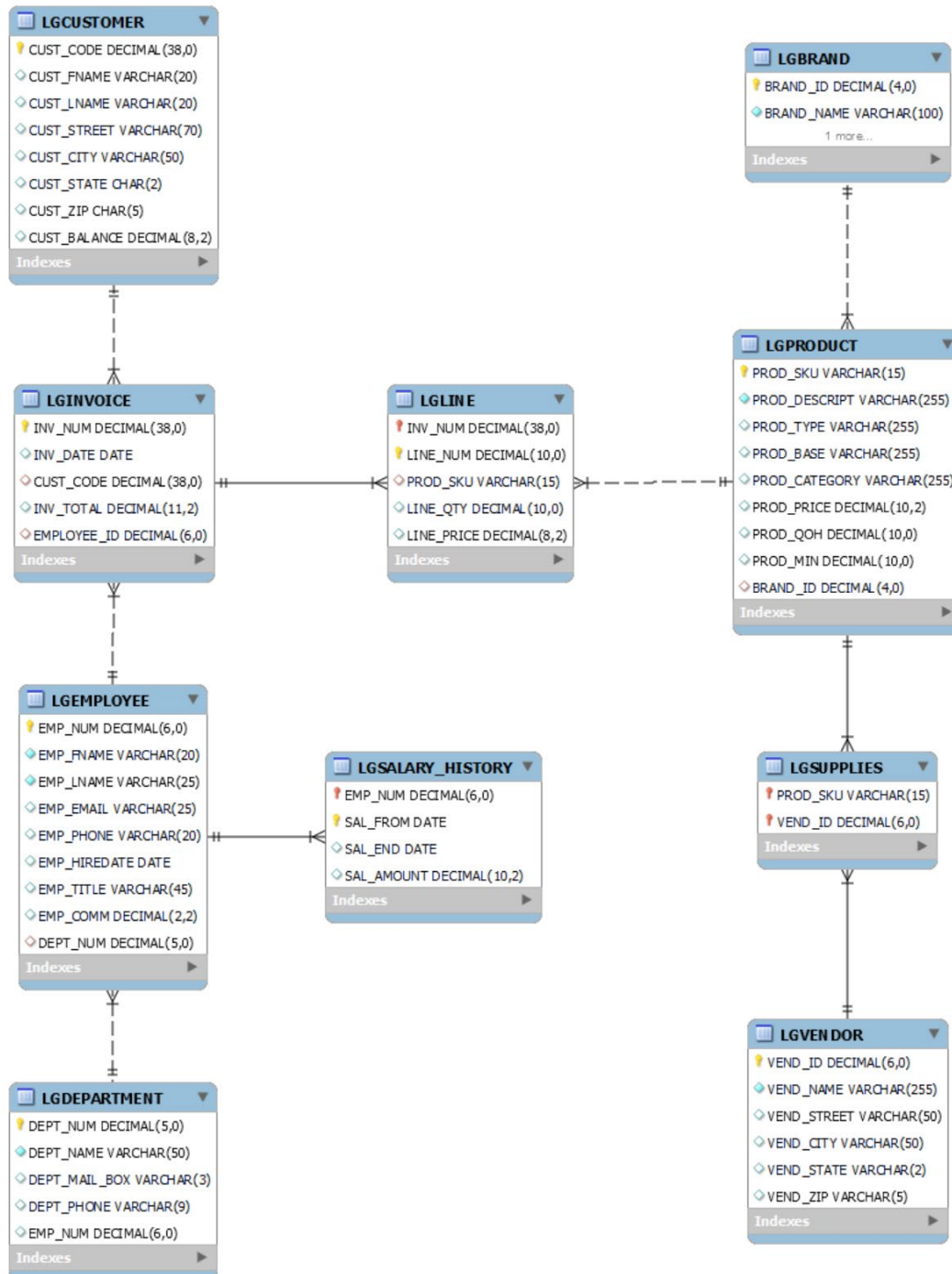# SQL Lab – ProblemSet07

Summary

The *LargeCo* database stores data for a company that sells paint products. The company tracks the sale of products to customers. The structure of the *LargeCo* database is shown below.

Database Schema

LGCUSTOMER
- CUST_CODE DECIMAL (38,0)
- CUST_FNAME VARCHAR(20)
- CUST_LNAME VARCHAR(20)
- CUST_STREET VARCHAR(70)
- CUST_CITY VARCHAR(50)
- CUST_STATE CHAR(2)
- CUST_ZIP CHAR(5)
- CUST_BALANCE DECIMAL (8,2)
- Indexes

LGBRAND
- BRAND_ID DECIMAL (4,0)
- BRAND_NAME VARCHAR(100)
- 1 more...
- Indexes

LGINVOICE
- INV_NUM DECIMAL(38,0)
- INV_DATE DATE
- CUST_CODE DECIMAL (38,0)
- INV_TOTAL DECIMAL(11,2)
- EMPLOYEE_ID DECIMAL (6,0)
- Indexes

LGLINE
- INV_NUM DECIMAL(38,0)
- LINE_NUM DECIMAL(10,0)
- PROD_SKU VARCHAR(15)
- LINE_QTY DECIMAL (10,0)
- LINE_PRICE DECIMAL(8,2)
- Indexes

LGPRODUCT
- PROD_SKU VARCHAR(15)
- PROD_DESCRIPT VARCHAR(255)
- PROD_TYPE VARCHAR(255)
- PROD_BASE VARCHAR(255)
- PROD_CATEGORY VARCHAR(255)
- PROD_PRICE DECIMAL(10,2)
- PROD_QOH DECIMAL(10,0)
- PROD_MIN DECIMAL(10,0)
- BRAND_ID DECIMAL (4,0)
- Indexes

LGEMPLOYEE
- EMP_NUM DECIMAL(6,0)
- EMP_FNAME VARCHAR(20)
- EMP_LNAME VARCHAR(25)
- EMP_EMAIL VARCHAR(25)
- EMP_PHONE VARCHAR(20)
- EMP_HIREDATE DATE
- EMP_TITLE VARCHAR(45)
- EMP_COMM DECIMAL(2,2)
- DEPT_NUM DECIMAL(5,0)
- Indexes

LGSALARY_HISTORY
- EMP_NUM DECIMAL(6,0)
- SAL_FROM DATE
- SAL_END DATE
- SAL_AMOUNT DECIMAL(10,2)
- Indexes

LGSUPPLIES
- PROD_SKU VARCHAR(15)
- VEND_ID DECIMAL(6,0)
- Indexes

LGDEPARTMENT
- DEPT_NUM DECIMAL(5,0)
- DEPT_NAME VARCHAR(50)
- DEPT_MAIL_BOX VARCHAR(3)
- DEPT_PHONE VARCHAR(9)
- EMP_NUM DECIMAL(6,0)
- Indexes

LGVENDOR
- VEND_ID DECIMAL(6,0)
- VEND_NAME VARCHAR(255)
- VEND_STREET VARCHAR(50)
- VEND_CITY VARCHAR(50)
- VEND_STATE VARCHAR(2)
- VEND_ZIP VARCHAR(5)
- Indexes

The database keeps data on customers (LGCUSTOMER), sales (LGINVOICE), products (LGPRODUCT), which products are on which invoices (LGLINE), employees (LGEMPLOYEE), the salary history of each employee (LGSALARY_HISTORY), departments (LGDEPARTMENT), product brands (LGBRAND), vendors (LGVENDOR), and which vendors supply each product (LGSUPPLIES). Some of the tables contain only a few rows of data, while other tables are quite large; for example, there are only eight departments, but more than 3,300 invoices containing over 11,000 invoice lines!

Instructions

Use file *ProblemSet06_07-SetupDB.sql* to create the *LargeCo* database in your RDS and populate the tables with starter data. You should not change the setup file, but you may want to read it for a sense of the data in the database. NOTE: This database setup file will take a LONG time to load, but you should only need to run it once and the database will be setup for both problem sets 06 and 07.

Using the structure of the *LargeCo* database shown above, create SQL commands to answer the problems in SQL Lab ProblemSet07. TEST your solutions before submitting them to the autograder!

Each problem comes in its own file with the problem description and a place for your solution. You will submit one file for each problem in the set to the autograder for evaluation. Zip all of your completed problems into a single file for submission to the autograder. Make sure you put your code in the location indicated and DO NOT change the names of the files!