Fundamentals of Data Management

Pass Tasks 7.1.1: SQL DML - Queries

Overview

In this tutorial, you will practise using SQL for querying a relational database.

Purpose

Learn to write SQL queries to find information in a relational database.

Task

Solve the tasks given below.

Time

This task should be completed in your seventh lab class and submitted for feedback in the seventh lab or at the beginning of lab 8. This tutorial is longer than others and tutorial 8 will be shorter, so you can continue with these tasks in lab 8.

Resources

- Elmasri & Navathe, Fundamentals of Database Systems Chapter 4

- Connolly & Begg, Database Systems, Chapter 6

- Churcher, Beginning SQL Queries, Chapters 2 and 3:

    o http://goo.gl/pzVVDI

- Online resources, e.g.
        http://www.w3schools.com/sql/sql_select.asp

Feedback

Discuss your solutions with the tutorial instructor.

Next

Get started on Task 7.1.2.

Pass Tasks 7.1.1 — Submission Details and Assessment Criteria

Document your solutions to the tasks using a word processor. Upload the solutions to Doubtfire as pdf. The tutors will discuss them with you in the lab.
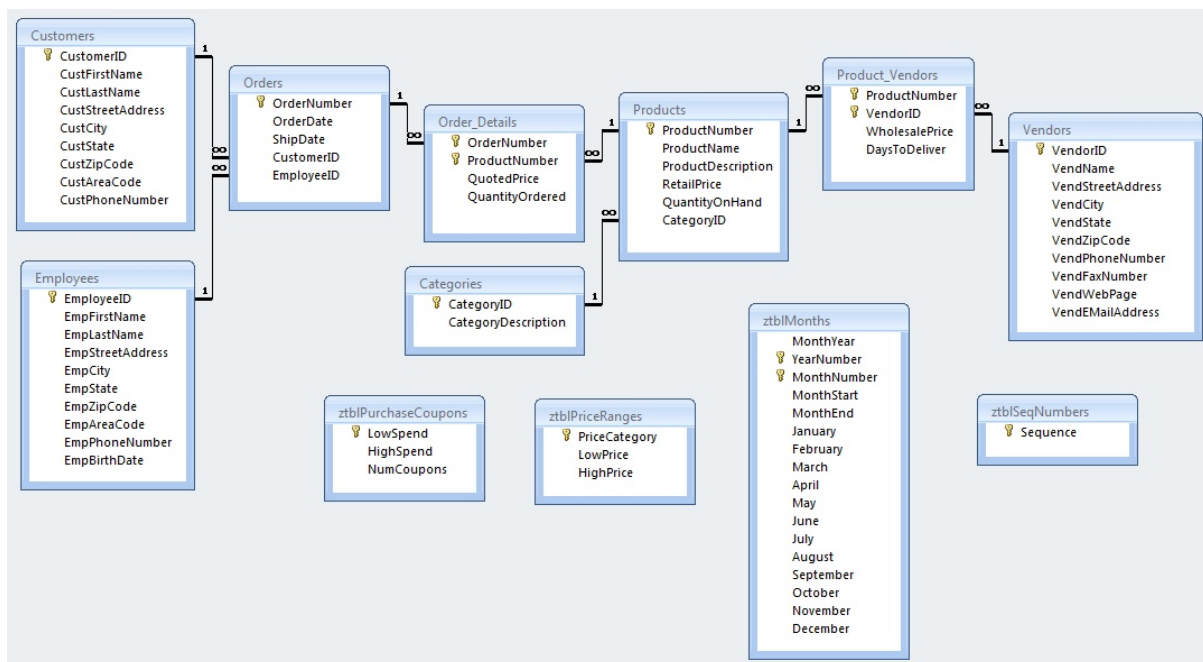
Consider the following schema:

Figure 1: Sales Orders Database

For XAMPP Users:

- Two SQL files are given (00 SalesOrdersStructureMy and 01 SalesOrdersDataMY).

- Open the first file(00 SalesOrdersStructureMy) in a text editor and copy the content.

- Paste the content (CTRL+V) in the MySQL terminal. It will create the schema.

- Enter records using the second SQL file. Open the file (01 SalesOrdersDataMY) and copy and paste in the MySQL terminal.

- Type : show databases; and check the database.

- Type : USE SalesOrdersExample; before starting tasks.

Subtask 7.1.1

Write and test a query that returns the entire content of the Customer table with all attributes and tuples included.

Reduce the attributes to the customer first and last names and phone number. The phone number should be concatenated using area code and phone number in the format +123 555-2686, where 123 is the area code and 555-2686 is the phone number. Give the column an alias.

Hint: MySQL does not recognise the | or + symbol for concatenation by default, you have to use the CONCAT(value1, value2) function.

(If you like a challenge you can see if you can get the || to work.)

Document both queries.