



# Fundamentals of Data Management

## Pass Tasks 7.1: 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 or 9. This tutorial is longer than others and tutorial 8 will be shorter, so you can continue with these tasks in lab 8.

### Resources

- Online module (from Canvas)
- Elmasri & Navathe, Fundamentals of Database Systems Chapter 4
- Connolly & Begg, Database Systems, Chapter 6
- Churcher, Beginning SQL Queries, Chapters 2 and 3:
  - [https://learning.oreilly.com/library/view/beginning-sql-queries/9781484219553/A158240\\_2\\_En\\_2\\_Chapter.html](https://learning.oreilly.com/library/view/beginning-sql-queries/9781484219553/A158240_2_En_2_Chapter.html)
- Online resources, e.g.  
[http://www.w3schools.com/sql/sql\\_select.asp](http://www.w3schools.com/sql/sql_select.asp)

### Feedback

Discuss your solutions with the tutorial instructor.

### Next

Get started on module 8.

## Pass Tasks 7.1 — 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:

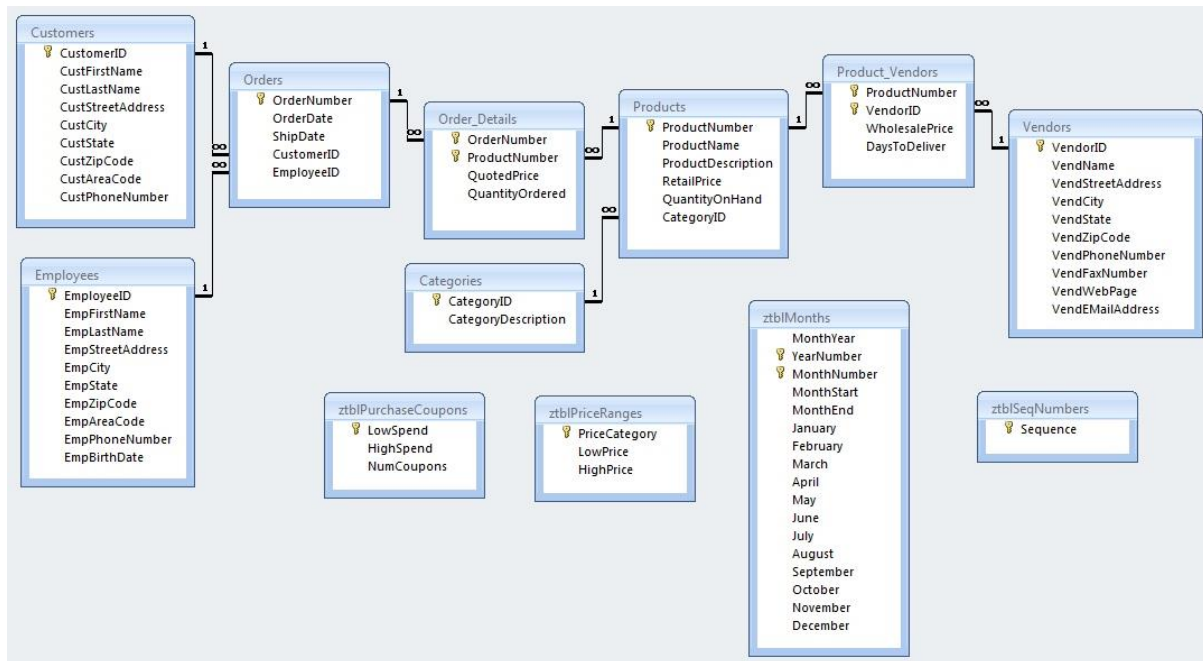


Figure 1: Sales Orders Database

### Subtask 7.1.3

Write a query that shows the number of customers for per state as shown below ( the query from part a to show the numbers for each of the states:

Customers	CustState
7	CA
4	OR
6	TX
11	WA

**Hint:** You have to use the count function and GROUP BY to this.

Document the query.