



LAB 1

Lab Overview

Start by reading and deciphering the case study to find out the customers requirements for this project. In this lab you are expected to create schemas with all the attributes and domains using the case study. Make sure that you document all Create table statements and Insert statements so you can alter these after receiving feedback on your design.

Rules

The installation guide provides students with the proper software needed to complete this lab.

1. The labs must be done in groups of exactly two people. No larger groups are allowed, and if you have extraordinary extenuating circumstances that force you to do the labs alone, you must obtain permission to do so from the course leader. Both students in a group must be able to present all of the lab for the group to pass. Lab assistants do not record partial labs.
2. You must present correct and valid solutions to all the given tasks in order to pass the lab.
3. Presenting P+ assignments are optional for a higher grade if the given tasks are completed and passed.
4. Each correct and valid P+ assignment will result in a P+ point.
5. This is a PSQL lab. No other programming languages, either embedded in the database or external to it, are allowed.
6. Please refrain from creating any [functions](#) since this lab is designed to assess query programming languages

Lab Presentation

Course related terminology is expected during the the lab presentation and make sure you have the following ready to be presented to the TA:

- Show your psql database in the KTH server through the command prompt/terminal.
- Thorough description of the database design using schemas with domains according to the format presented in lectures.
- Code for the database creation showing keys, domains etc.
- Show the contents of the database.



LAB 1

Before you start

Read through the “PostgreSQL Installation Guide” and have the terminal ready for the tasks. Make sure you are saving all your insert statements. PostgreSQL uses the “.psql” fileformat. You can use your preferred text editing software.

Tip: Do your best to make sure your database is in BCNF! While it’s not a requirement to pass this lab, it will be in lab 2. You can achieve this by following the Normalization guide.

Tasks

Creating the Database

Create all the tables that are necessary for the LMS. Save your Create Table code snippets in a format of your choice so that you can re-use it for later labs.

The whole database must:

1. Have well thought out names for each table and attribute.
2. Reasonable domains for each attribute.
3. Sensible primary key(s) for each table.

Finally, check that the tables have been properly added to the LMS.

For each table, write in the prompt:

```
SELECT * FROM <Insert table name here>;
```

LAB 1

P +

Make the CREATE TABLE statements in PSQL for the following ER Diagram.

