

# Lab: Table Relations

This document defines the **lab exercise assignments** for the [PostgreSQL course @ Software University](#).

Submit your solutions in the [SoftUni Judge System](#).

Create a database called **camp**. Import **camp\_db.sql** file, using **camp's** query tab, and run all queries. Get familiar with all **tables**. You will use them in the following exercises.

## 1. Mountains and Peaks

Write a query to create two tables – **mountains** and **peaks** and **link their fields** properly by setting **Foreign Key Constraint (fk\_peaks\_mountains)**. Tables should have:

- Mountains:
  - **id**
  - **name**, max-length = 50
- Peaks:
  - **id**
  - **name**, max-length = 50
  - **mountain\_id**

Submit your queries in the Judge system.

## 2. Trip Organization

Write a query to retrieve information about **SoftUni camp's transportation organization**. Get information about people who are **drivers (driver\_name and driver\_id)** and their **vehicle type**. The driver's name field represents the **full name** of a **driver**.

Submit your queries in the Judge system.

### Example

driver_id	vehicle_type	driver_name
1	bus	Simo Sheytanov
2	van	Roli Dimitrova
1	van	Simo Sheytanov
...	...	...

## 3. SoftUni Hiking

Get information about the hiking **routes (start\_point and end\_point)** and their **leaders (leader\_name and leader\_id)**.

Submit your queries in the Judge system.

### Example

start_point	end_point	leader_id	leader_name
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Hotel Malyovitsa	Malyovitsa Peak	3	RoYaL Yonkov
Hotel Malyovitsa	Malyovitsa Hut	3	RoYaL Yonkov
Ribni Ezera Hut	Rila Monastery	3	RoYaL Yonkov
Borovets	Musala Peak	4	Ivan Ivanov

## 4. Delete Mountains

Drop tables from Task 1.

Write a query to create a **one-to-many relationship** between table **mountains** (**id**, **name**) and table **peaks** (**id**, **name**, **mountain\_id**). Set a **Foreign Key Constraint (fk\_mountain\_id)** and **On Delete rule**.

When a **mountain** is **removed** from the database, **all** its **peaks** are also **deleted**.

Submit your queries in the Judge system.

## 5. Project Management DB\*

\*This task is excluded from Judge System.

Write a query to create a project management database, according to the following E/R Diagram:

