# Lab: Database Programmability and **Transactions**

This document defines the exercise assignments for the MySQL course @ Software University. Please submit your solutions (source code) to all the below-described problems in Judge.

You are provided with the **soft uni** database. Use it in the following assignments.

#### 1. Count Employees by Town

Write a function ufn count employees by town(town name) that accepts town name as parameter and returns the count of employees who live in that town. Submit your queries using the "MySQL Run Skeleton, run queries and check DB" strategy.

#### **Example**

The following example is given with employees living in **Sofia**.



#### 2. Employees Promotion

Write a stored procedure usp raise salaries (department name) to raise the salary of all employees in given department as parameter by 5%. Submit your queries using the "MySQL Run Skeleton, run queries and check DB" strategy.

### **Example**

The following example is given with employees in the "Finance" department ordered by first\_name, then by salary.

first_name	salary
Barbara	27 720.00
Bryan	19 950.00
Candy	19 950.00

## 3. Employees Promotion by ID

Write a stored procedure usp\_raise\_salary\_by\_id(id) that raises a given employee's salary (by id as parameter) by 5%. Consider that you cannot promote an employee that doesn't exist – if that happens, no changes to the database should be made. Submit your queries using the "MySQL Run Skeleton, run queries and check DB" strategy.

#### **Example**

The following example is given with **employee id = 17**.

salarv















# 4. Triggered

Create a table deleted\_employees(employee\_id PK,

first\_name,last\_name,middle\_name,job\_title,department\_id,salary) that will hold information about fired(deleted) employees from the employees table. Add a trigger to employees table that inserts the corresponding information in deleted\_employees. Submit your queries using the "MySQL Run Skeleton, run queries and check DB" strategy.













