

Homework 8

Due March 31, 2023

This homework set uses the *classicmodels* database (<https://www.mysqltutorial.org/mysql-sample-database.aspx>). Provide screen shots / texts of SQL statements **and** of results.

Problem 1:

- (a) Create a view `customer_payments` from tables `customers` and `payments` with fields
- `customerName`
 - `contactLastName`
 - `contactFirstName`
 - `checkNumber`
 - `paymentDate`
 - `amount`
- (b) Use this view to obtain the details of the five last payments.
- (c) Create a view `customer_orders` from tables `orderdetails`, `orders`, `customers` with attributes
- `customerName`
 - `contactLastName`
 - `contactFirstName`
 - `orderDate`
 - `total`
- that allows us to see all orders with `customerName` information.
- (d) Using these two views, create an SQL statements that gives the customer name, the amount, and the date of all orders and payments with a customer whose name contains the string "Euro". The payments should be negative numbers. (Hints: Unionize. Arithmetic expressions are allowed in SELECT.)

Problem 2:

Create a stored procedure (provide the definition either as a workbench screen shot or as a SQL script) that finds all payments of a customer given by parts of the customer name between two dates.

Problem 3:

Create a function of year and customer-name that returns the customer status based on the total amount of orders in all years up to, but not including the selected year. If you look at the definition of `customers`, you see that `customer-name` is a `VARCHAR(60)` character. The status is defined as "Normal" if the total order volume is less than 100,000, Silver between 100,000 and 200,000 and "Gold" if the total order volume is larger than 200,000.

When you call your function, you have to specify the database, i.e. you need to call
`classicmodels.status(customerName, 2004)`

Then write a query that displays the customer name, the status up till 2004 and the status up till 2005.