

## GUI, schemata and database objects

### Exercise 1 - GUI of DBeaver

- a) How many tables can you find that belong to the userdemo schema?
- b) How many columns (= fields) does the userdemo.zip table have?
- c) Rightclick the userdemo.zip table -> View table. On top of the appearing window (= table viewer) you find the following tabs: Properties, Data, Entity Relationship ER Diagram. Choosing the Properties tab: Have a look at the Columns (left-hand tabs). Of what types are these columns? Check the other things on these tabs to see what a database table consists of. Particularly have a look at DDL (Data Definition Language).
- d) What data is stored in this table? Switch (on top tabs) from Properties to the Data. How many records (= rows, tuples) are in the userdemo.zip table?
- e) Switch back to Properties. Have a look at the Indexes left-hand tab. The index you see is should be of type/access type btree. Try to find out by searching the internet what this B-tree index is doing on table userdemo.zip.

You can now close this window (= table viewer).

### Exercise 2 – Scripts (= Text files containing SQL) with SQL Editor

- a) Create a new SQL Script/File: SQL Editor -> New SQL Script.
- b) Right click userdemo.person table -> Generate SQL -> SELECT. In the dialog select Copy. You can now paste this SQL (Structure Query Language) query to your script. You can do that with multiple tables. Each SQL statement is separated by a semicolon;  
Click on one of the lines and execute it (Ctrl + Enter or use the orange icons on the left-hand side). Can you see the records that reside in this table? How many records are in there (indirectly through GUI information)?
- c) Close and save this script. Reopen through your project scripts folder. Try to figure out and run a SQL statement which answers the following question directly: How many records does the userdemo.zip table have?
- d) Generate a SELECT statement with the **view** userdemo.bestrest\_zip\_v in your script. Execute this SQL statement/query. How many restaurants do we have in the view? Obviously, we can query a view like a table. But behind the scene this view is a **saved query**. It connects/joins two tables: Best restaurants table with the zip code table. The first table defines restaurants, the second one zip codes

with the corresponding zip names. How was this view constructed? Find out the constructing SQL (=DDL, Data Definition Language type SQL) in the properties-source tab of the view.

When you're done: Don't forget to disconnect your session from the database. Rightclick your connection -> Disconnect. Close DBeaver.