

Installing MySQL and MySQL Workbench

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Installing MySQL

- Download MySQL from Oracle
 - Alternative for your own projects: You can get MariaDB, a split of MySQL or BerkeleyDB
 - Follow the instructions of the OS

Installation

- Need administrator privileges
- Download
 - Go to <https://dev.mysql.com/downloads/installer/> and select according to Operating System
 - Create Oracle login
 - Follow instructions
 - Do NOT forget the password you are setting
 - On windows: Install as a service
- Add mysql to the path

Starting MySQL

- On MacOS: System Preferences has now a MySQL icon
 - Click on it and start services
- On Windows:
 - Open 'Run' Window by using Win key + R
 - Type 'services.msc'
 - Now search for MySQL service based on the version that is installed.
 - Click on 'stop', 'start' or 'restart' the service option.

Importing a Database

- Go to <https://www.mysqltutorial.org/mysql-sample-database.aspx>
- Download sample database
- Follow instructions

Python and MySQL

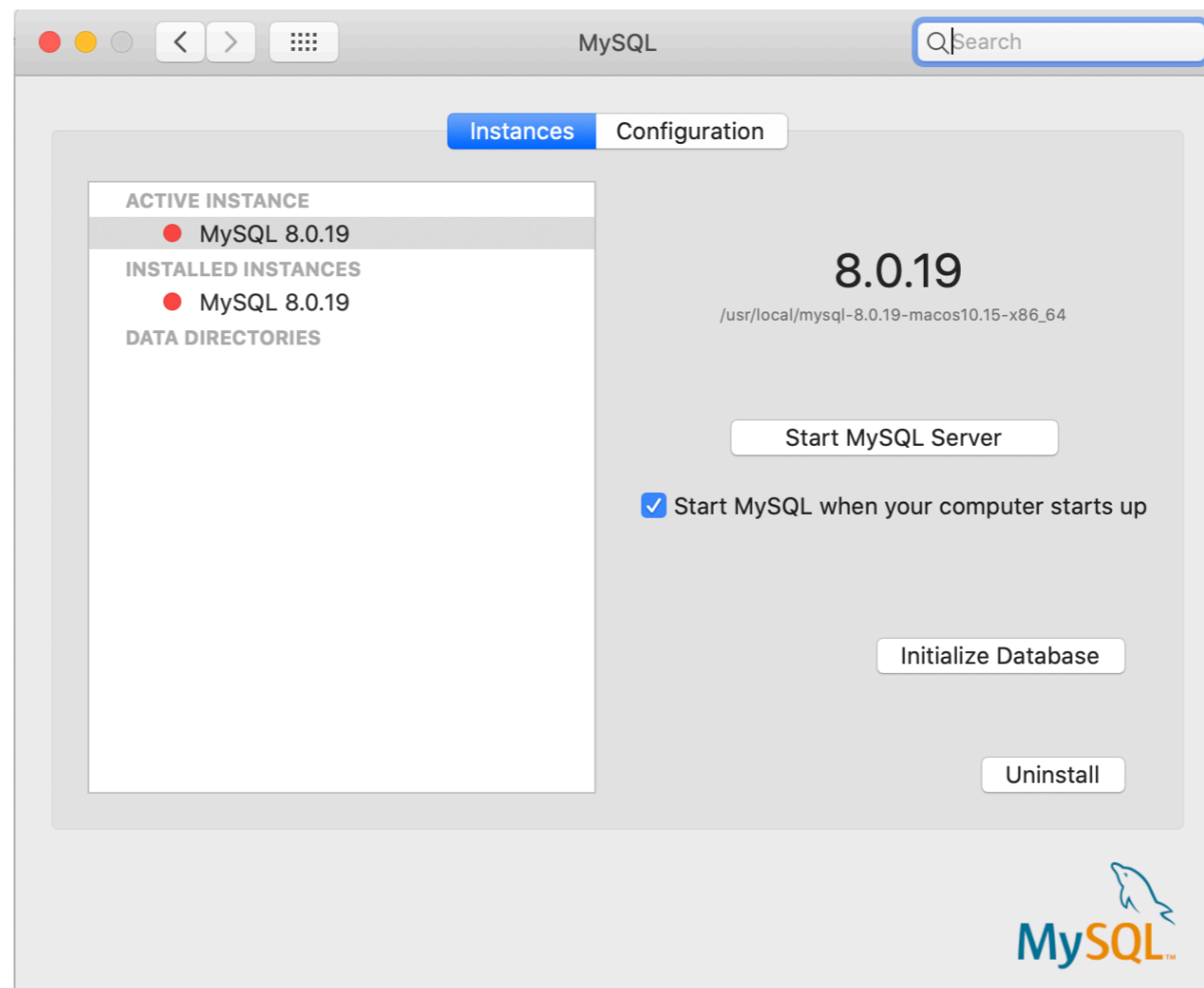
- There are different connectors
- Update your Python version
 - Then install a mysql connector
 - `pip3 install mysql-connector-python`

Installing MySQL Workbench

- Go to the Oracle download site and sign in
 - Install according to OS

SQL Work Bench

- Insure that your mysql server is running
 - MAC : System Preferences —> MySQL



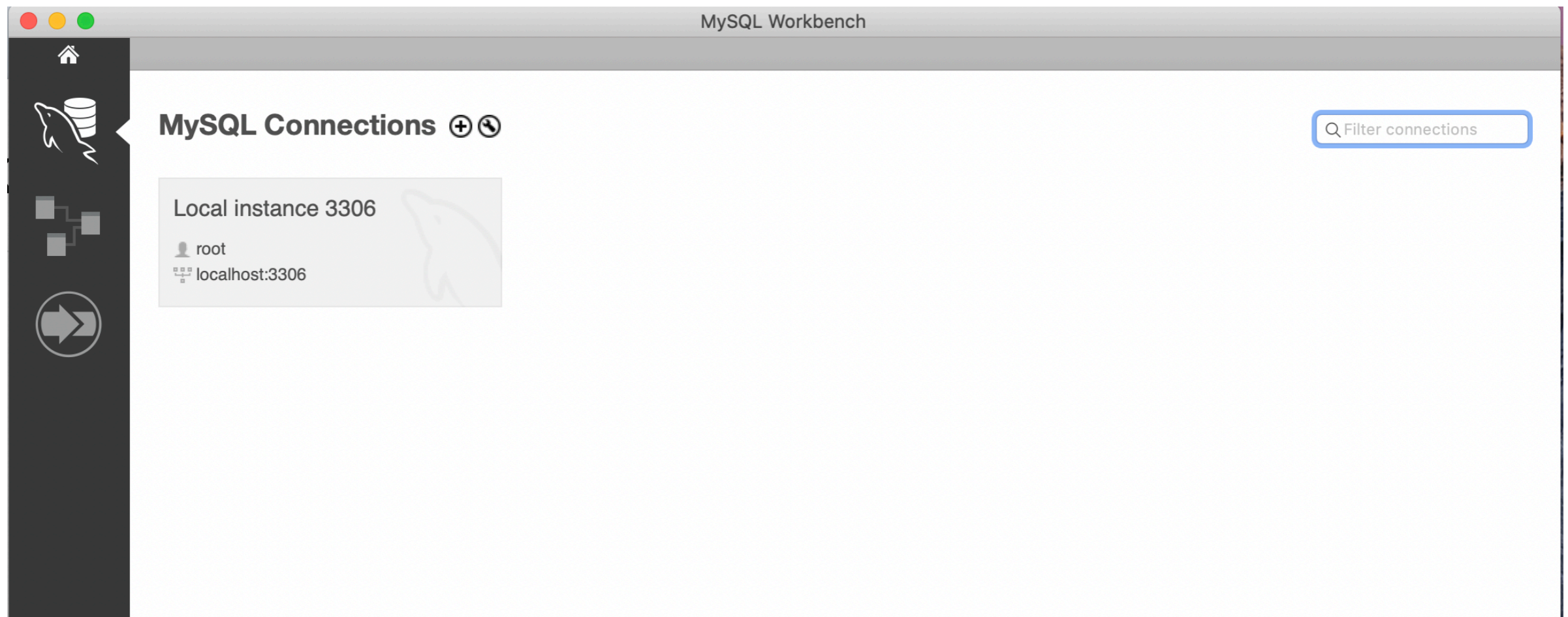
SQL Work Bench

- Starting MySQL server through a terminal
 - Find mysql.server

```
mysql/mysql/bin/ How to
support-files — -zsh — 80x24
Last login: Thu Jan 16 22:43:42 on ttys000
[thomasschwarz@Peter-Canisius ~ % cd /usr/local/mysql-8.0.19-macos10.15-x86_64/su
pport-files
[thomasschwarz@Peter-Canisius support-files % ls
mysql-log-rotate      mysql.server          mysqld_multi.server
[thomasschwarz@Peter-Canisius support-files % mysql.server start
zsh: command not found: mysql.server
[thomasschwarz@Peter-Canisius support-files % sudo ./mysql.server start
Password:
Sorry, try again.
Password:
Starting MySQL
.Logging to '/usr/local/mysql/data/Peter-Canisius.local.err'.
. SUCCESS!
thomasschwarz@Peter-Canisius support-files % █
```

SQL Workbench

- Open up SQL workbench
 - Select the SQL server (should be only one)

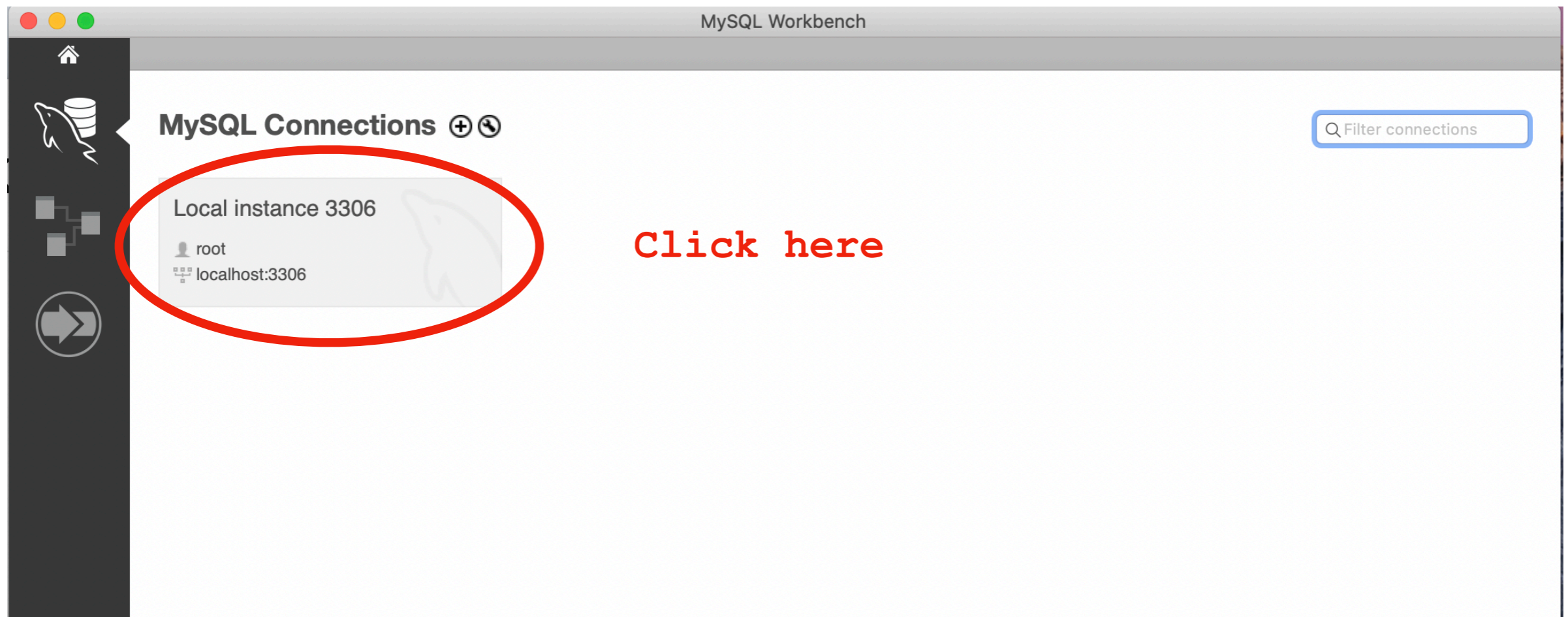


SQL Work Bench

- If there is no server, click on the + sign and add it.

SQL Workbench

- Open up SQL workbench
 - Select the SQL server (should be only one)

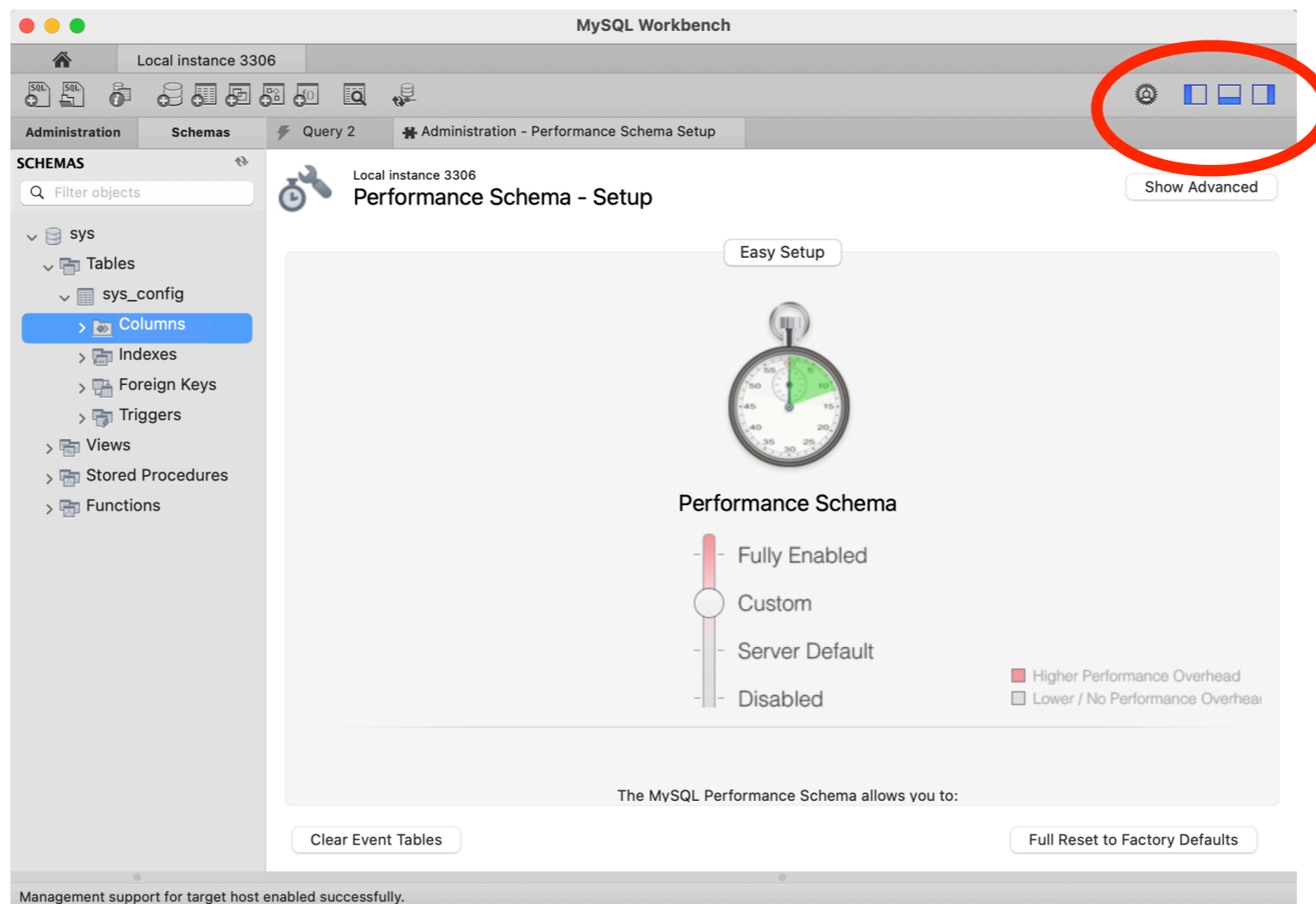


SQL-Workbench

- The main page shows all existing connections
 - Since you just installed MySQL, there should only be one

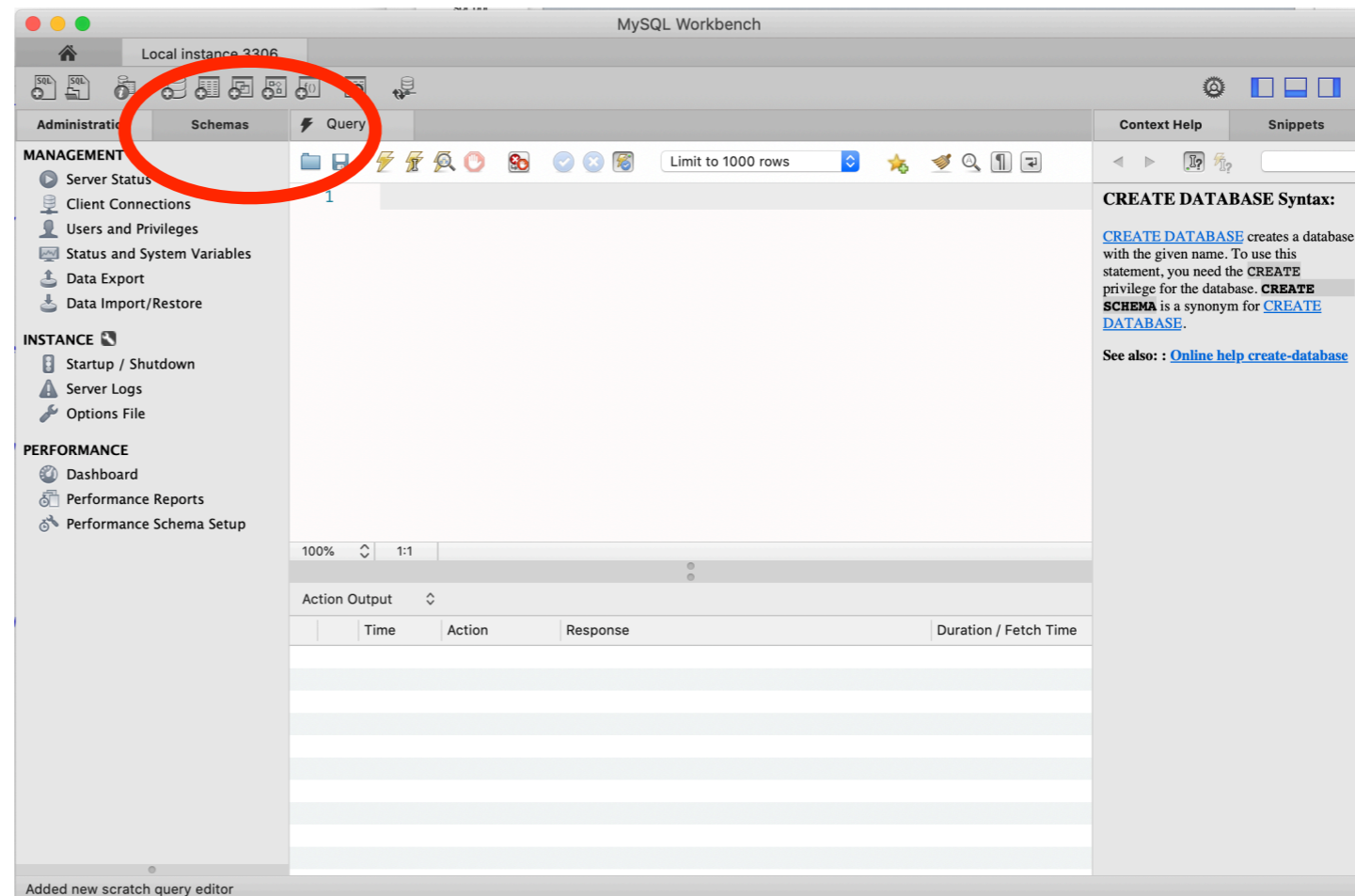
SQL Workbench

- Understanding the view
- Show left, right, down panel on the right



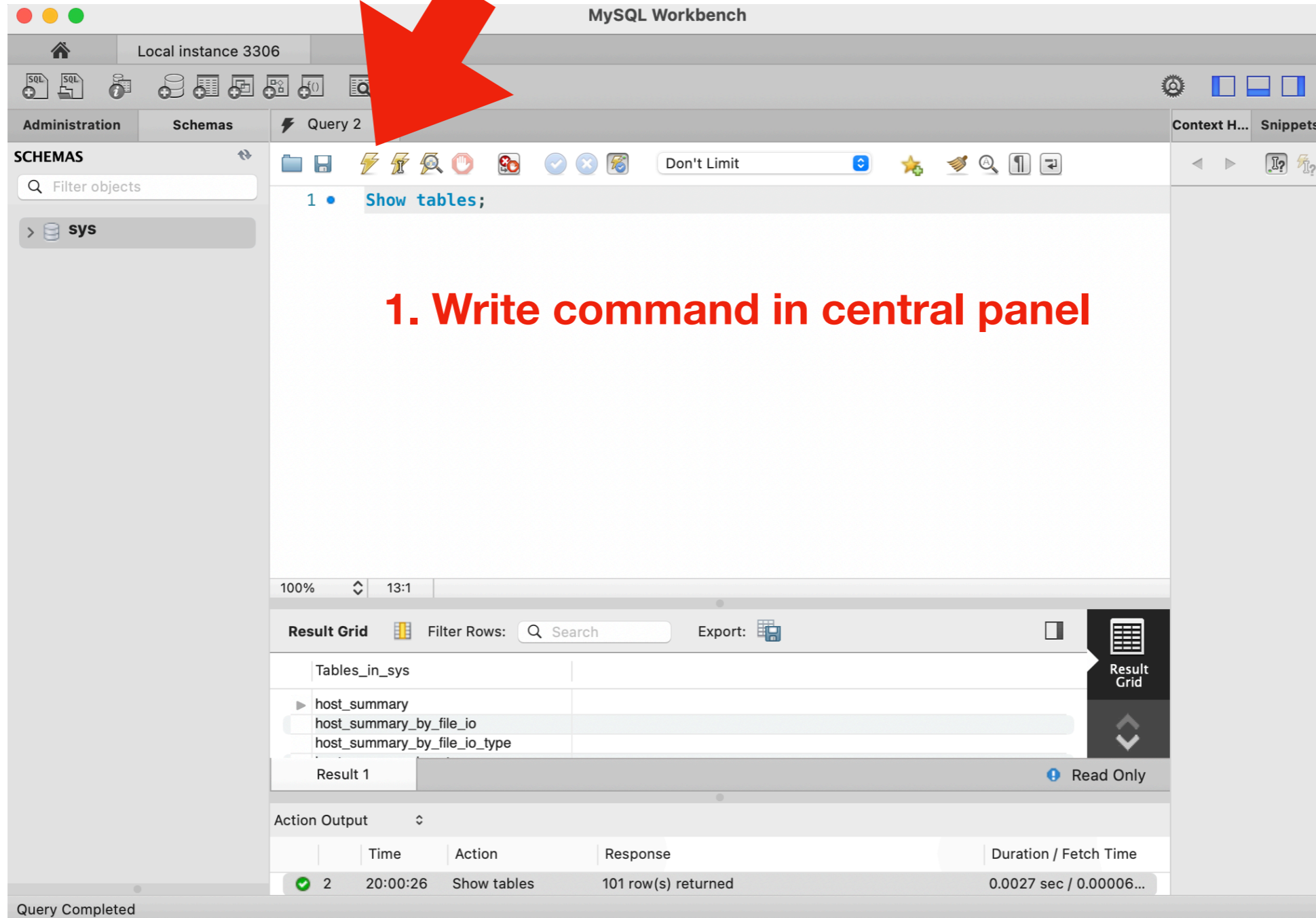
SQL Workbench

- Select Schemas
 - There should be at least one master scheme called sys



SQL Workbench

2. Click the flash symbol to execute



The screenshot shows the MySQL Workbench interface. The central panel contains the SQL command `Show tables;`. A large red arrow points to the flash symbol (execute button) in the toolbar above the query editor. Below the query editor, the **Result Grid** is visible, displaying the output of the query. The **Action Output** panel at the bottom shows the execution details.

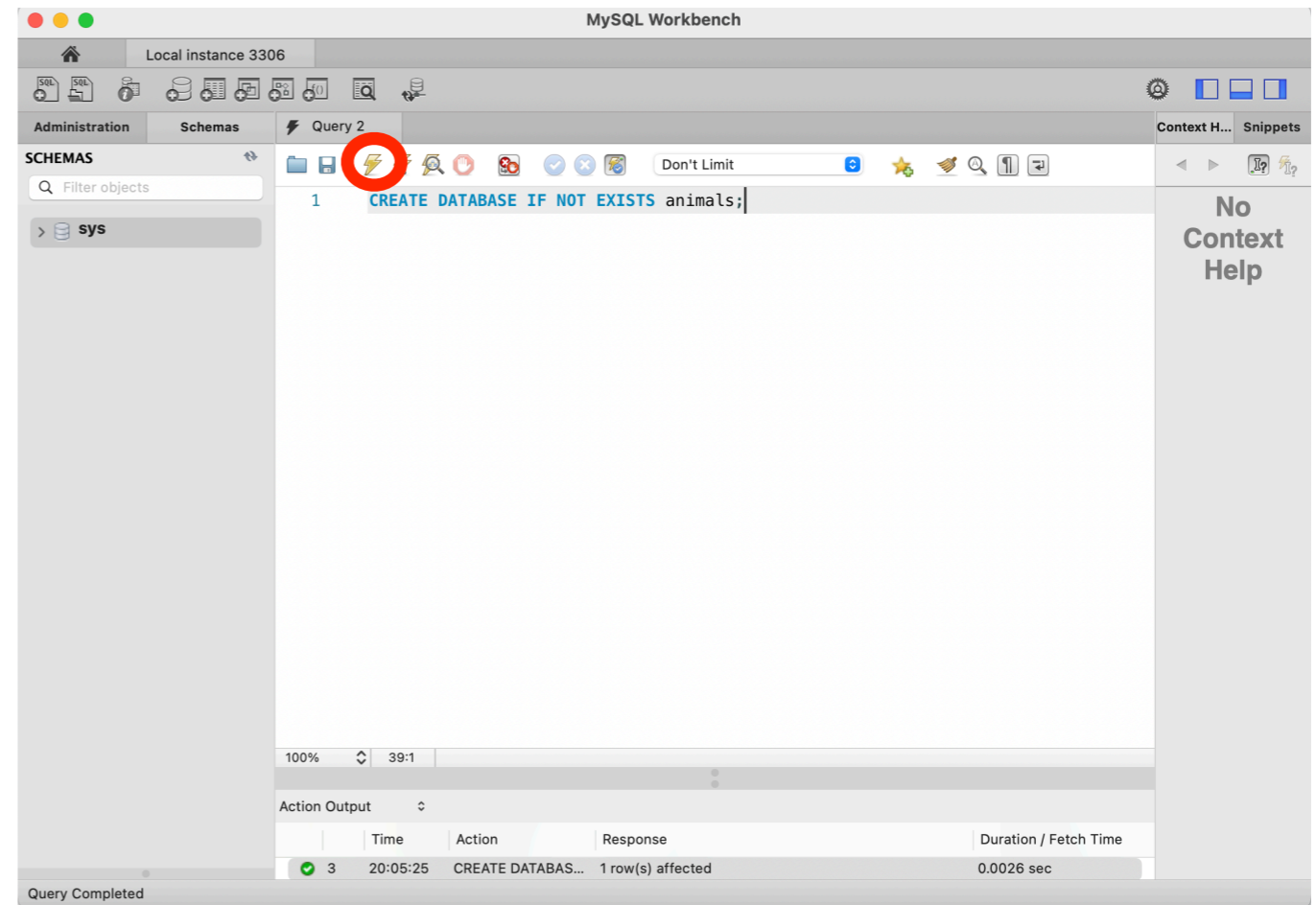
1. Write command in central panel

Time	Action	Response	Duration / Fetch Time
20:00:26	Show tables	101 row(s) returned	0.0027 sec / 0.00006...

Query Completed

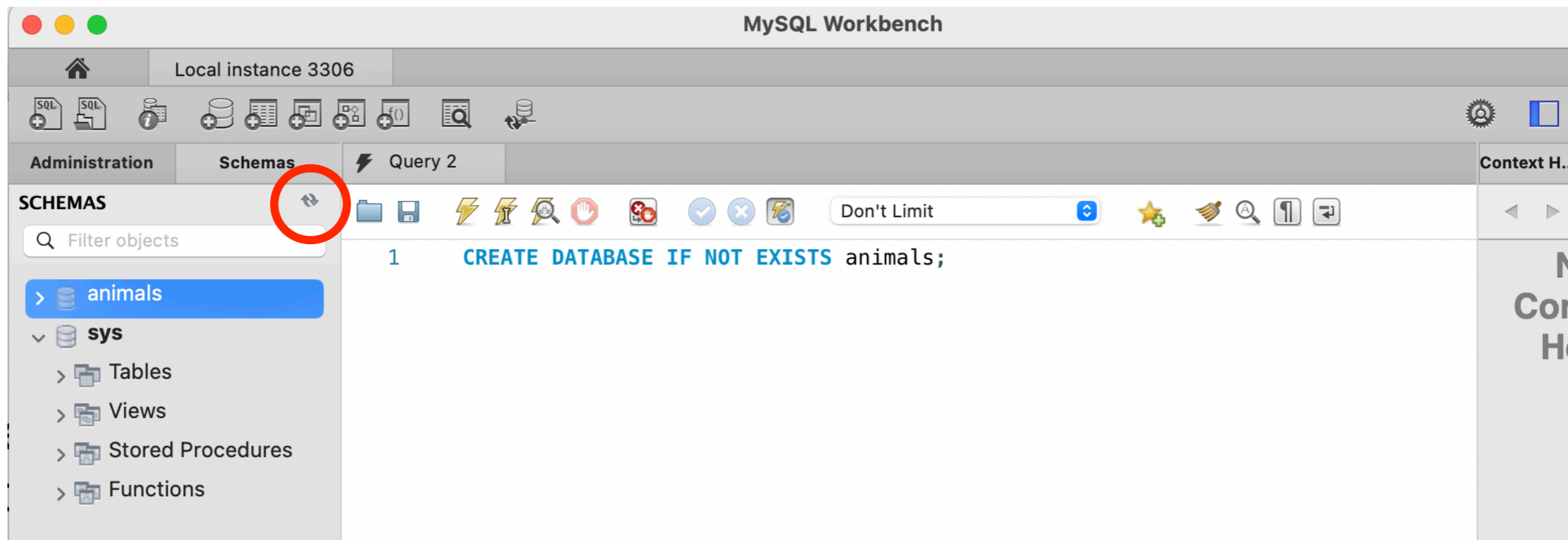
SQL Workbench

- In the middle panel, write:
 - CREATE DATABASE IF NOT EXISTS animals;
 - Then execute
 - Notice output



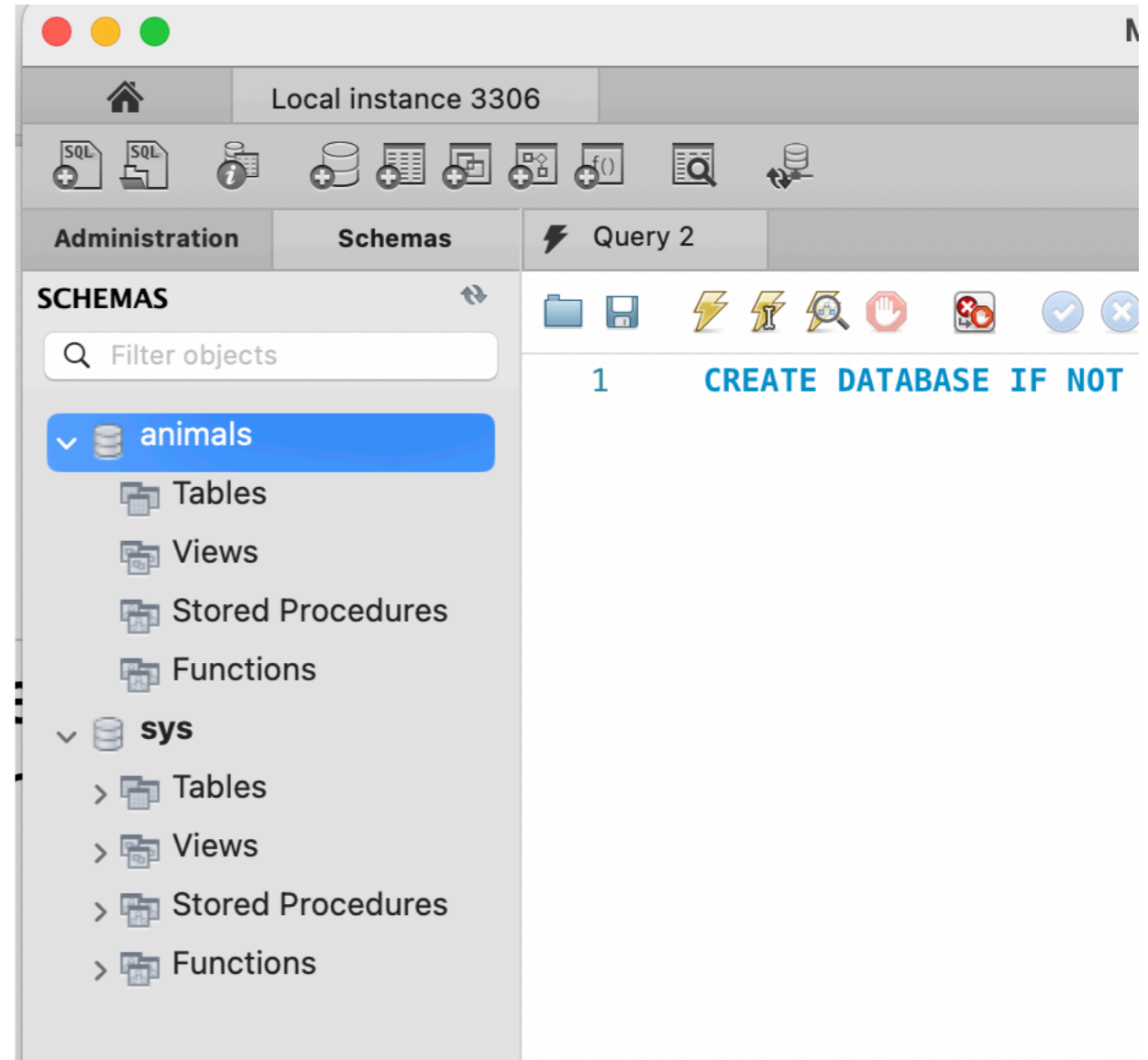
SQL Workbench

- After creating a database, need to update schemas in the upper right corner of the right panel



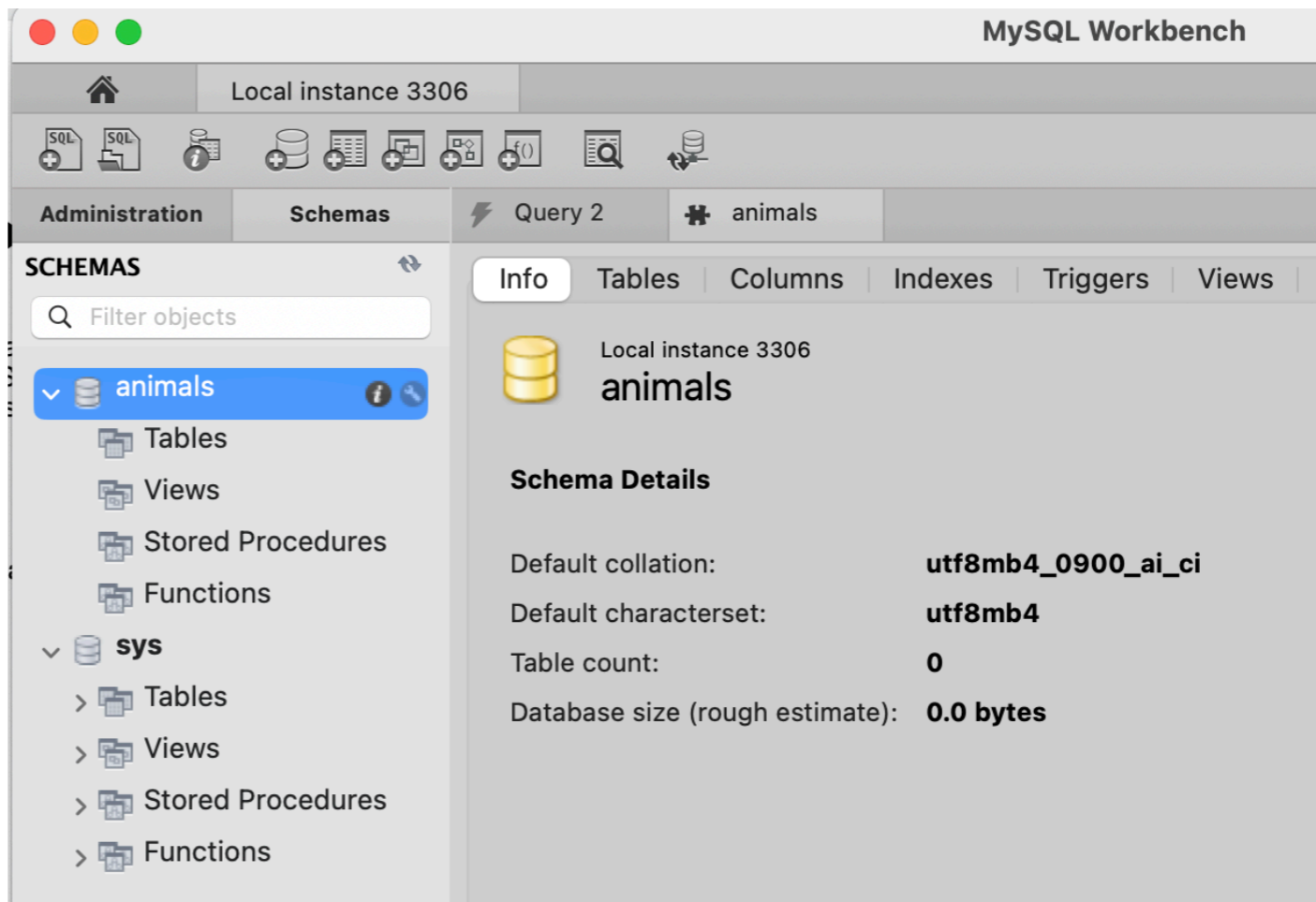
SQL Workbench

- There is more information on the schema in the right panel
- Just expand the name of the database



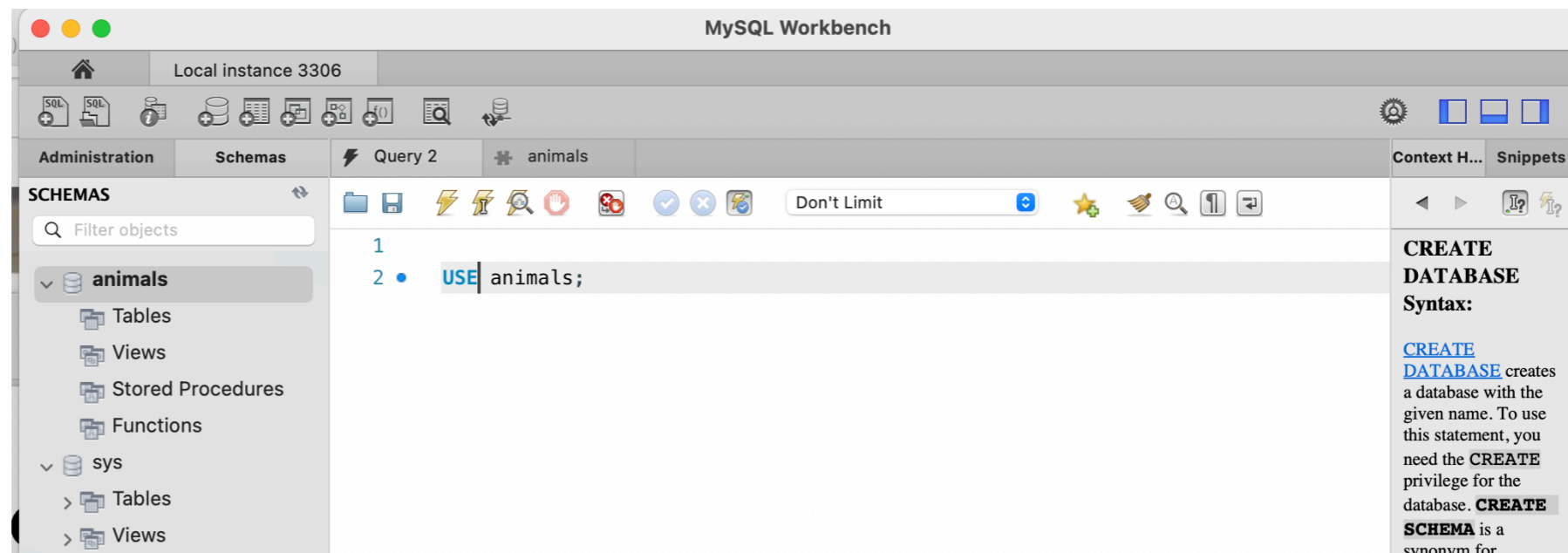
SQL Workbench

- Hover cursor over the name of the database
 - The information symbol (i) accesses more information



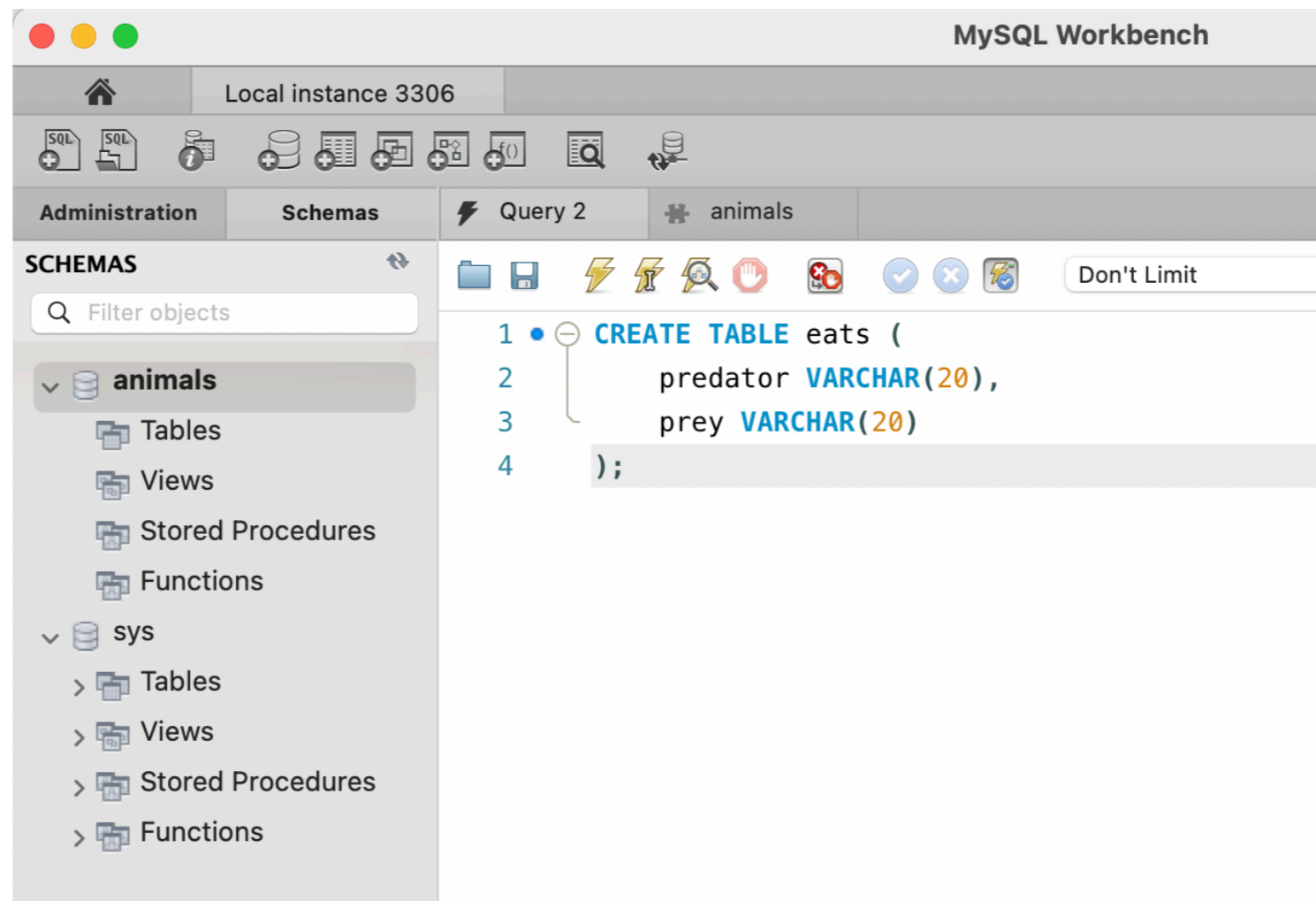
SQL Workbench

- Execute a query
 - `USE animals;`
- Now we can manipulate and use this database



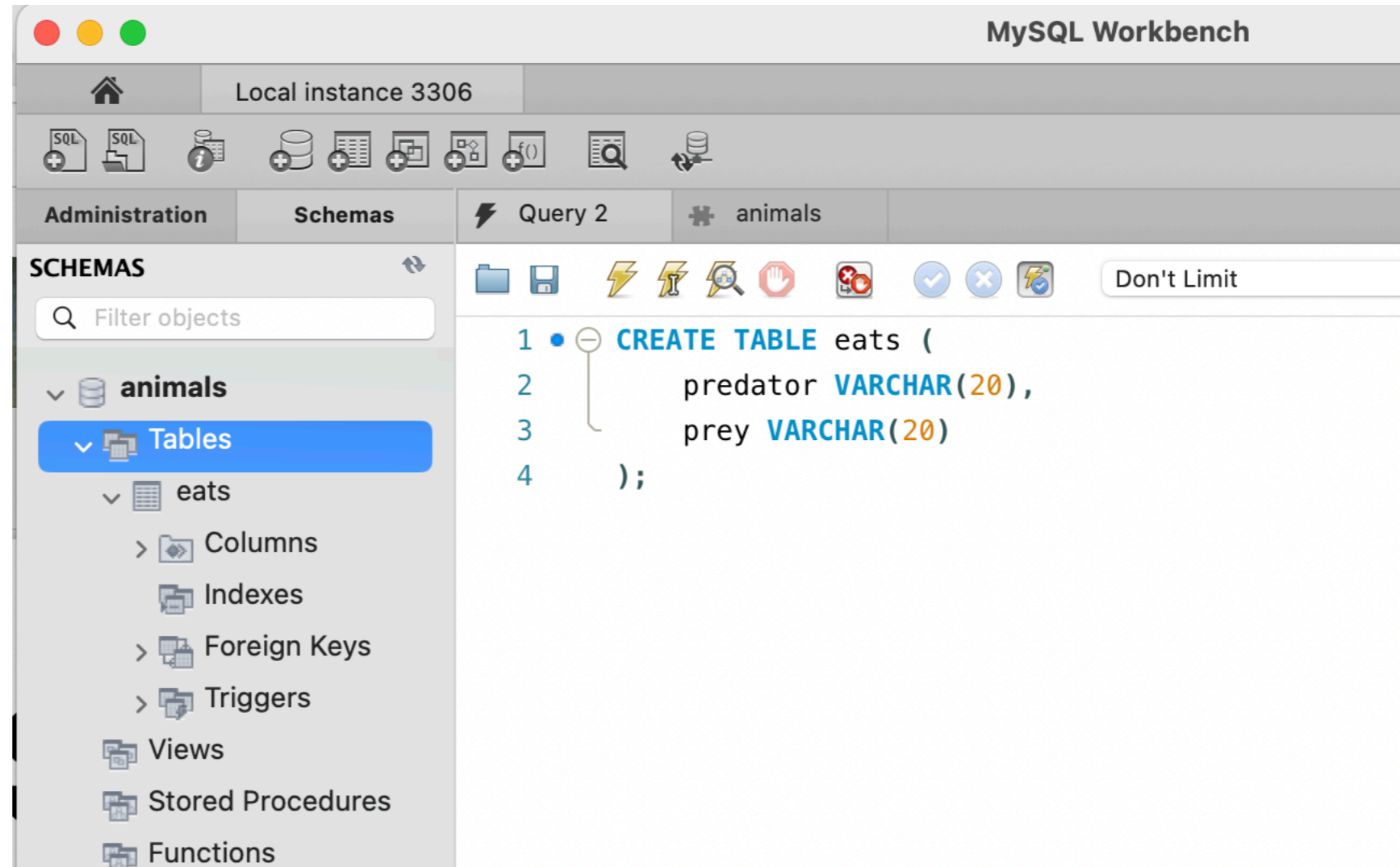
SQL Workbench

- Use queries to create a table



SQL Workbench

- After refreshing, we can find information about the new table by expanding the tab

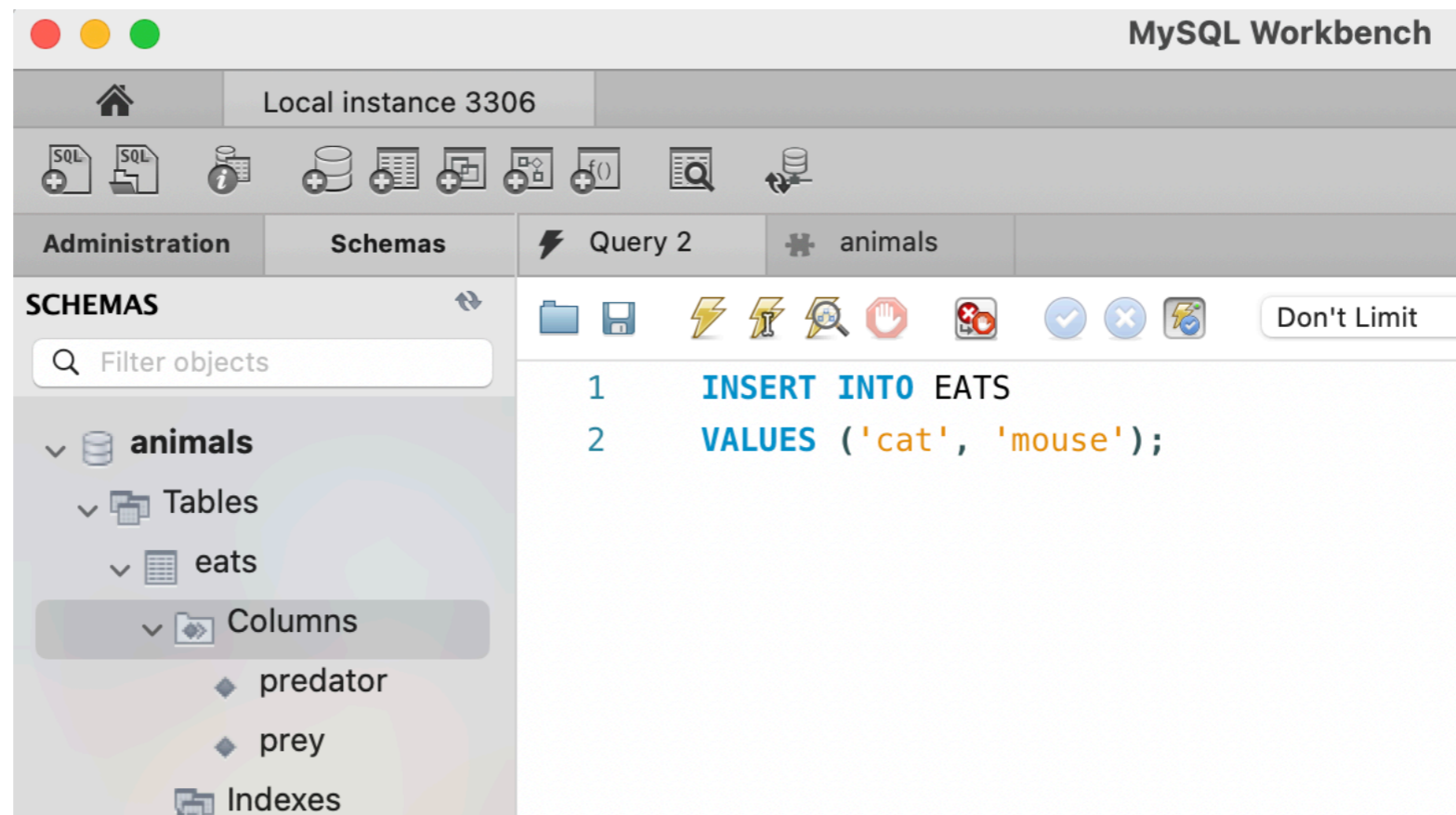


SQL Workbench

- Referring to MYSQL objects
 - Use a default database
 - `USE animals;`
 - `SELECT * FROM eats;`
 - Use the dot notation to specify database
 - `SELECT * FROM animals.eats;`

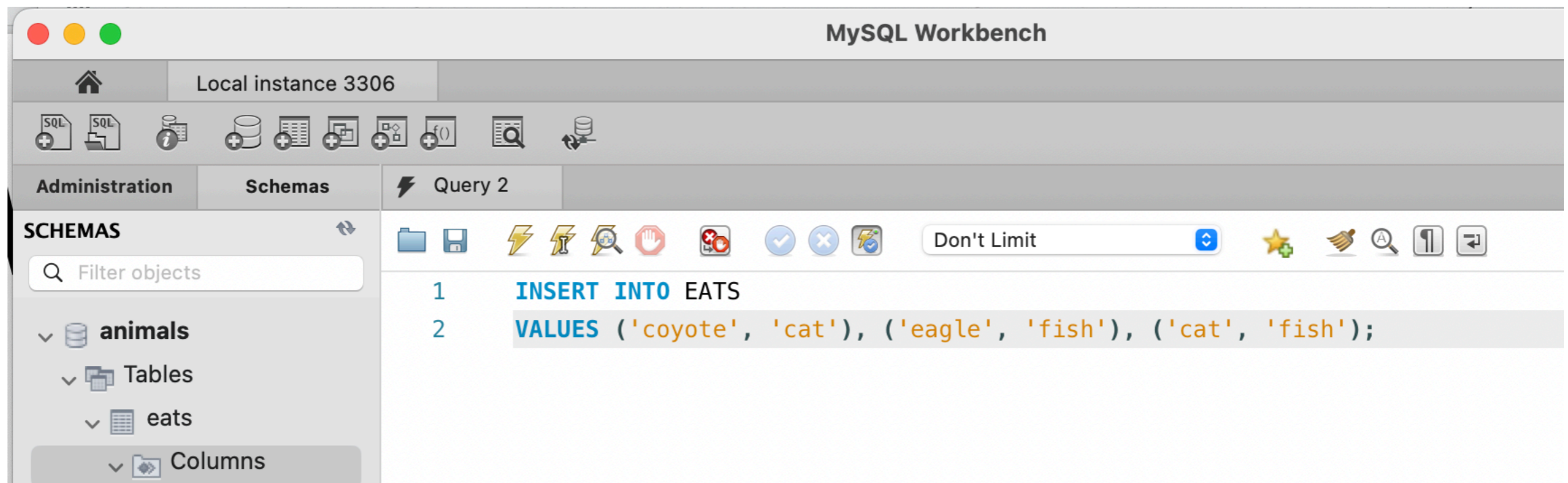
SQL Workbench

- Inserting into a data base table:



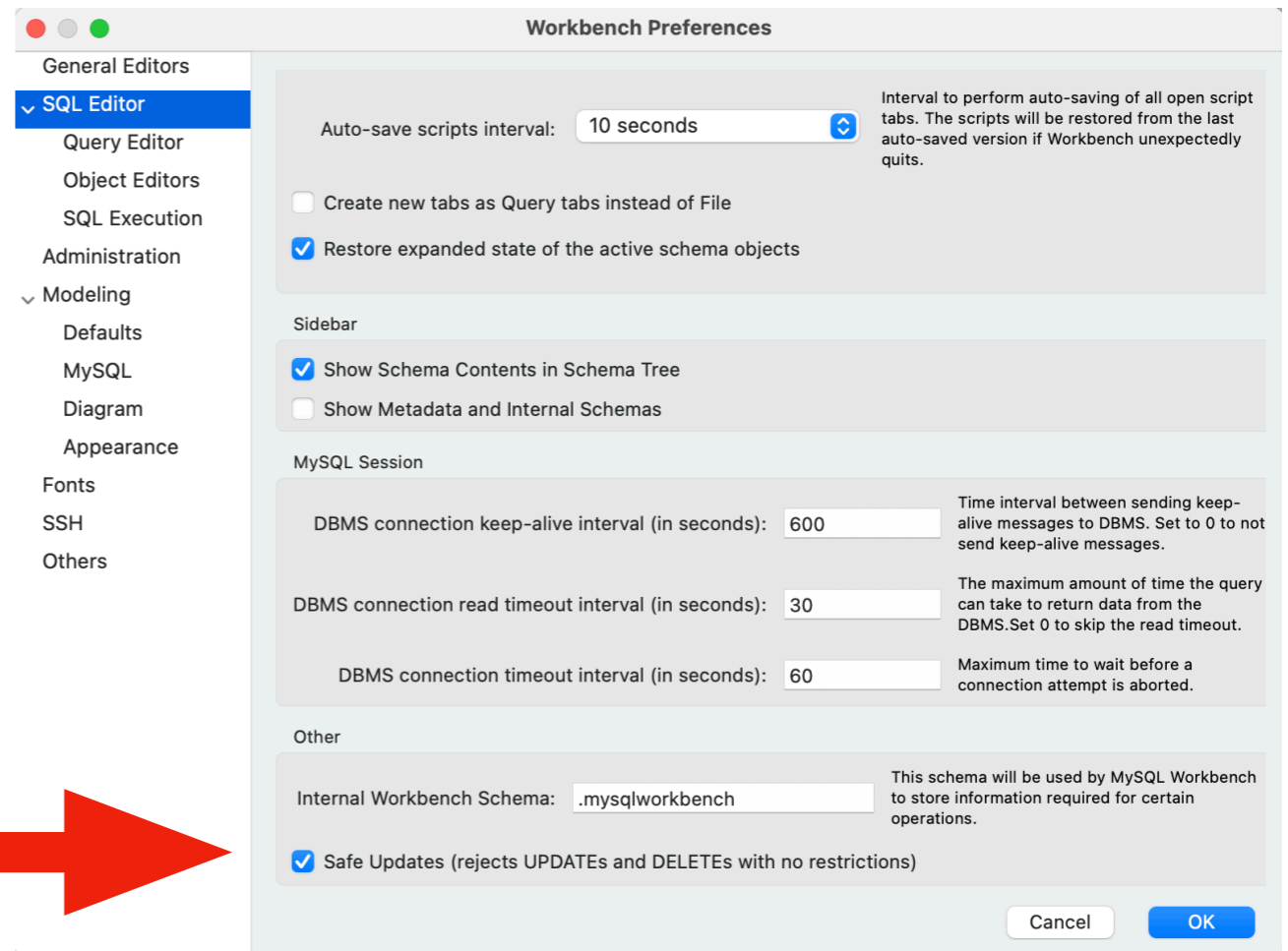
SQL Workbench

- We can insert multiple records



SQL Workbench

- If you made a mistake, you can delete records
- You might have to disable safe update mode
- Preferences:



SQL Workbench

- You can also issue a pseudo-query:

