

Lab1: MySQL Setup and Basic Database Exploration

Lab Objectives

By the end of this lab, students will be able to install MySQL Server and MySQL Workbench, connect to a MySQL database, import a sample database, and execute basic SQL commands.

Part 1: Install MySQL Server and MySQL Workbench

1. Download at: <https://dev.mysql.com/downloads/>
2. Follow this tutorial: <https://www.simplilearn.com/tutorials/mysql-tutorial/mysql-workbench-installation>
3. Make sure that you have **Set root password** and keep **port 3306**

Part 2: Connect to MySQL Server

1. Command Prompt
 - a. Open terminal/command prompt
 - b. Type: mysql -u root -p
 - c. Enter a password

mysql>

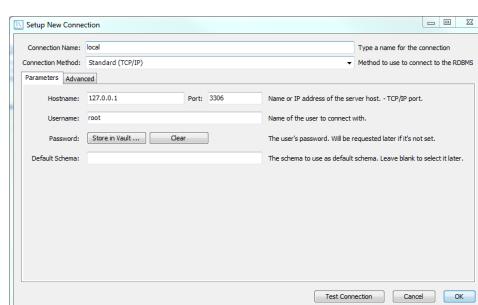
2. MySQL workbench

Hostname: localhost or 127.0.0.1

Port: 3306

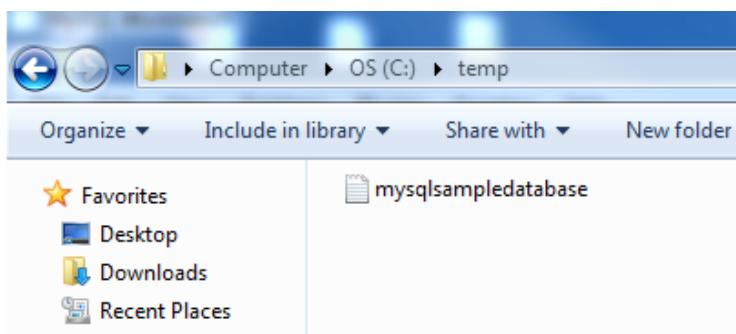
Username: root

Enter root password to connect



Part 3: Import Sample Database

1. Download sample database: <https://www.mysqltutorial.org/wp-content/uploads/2023/10/mysqlsampledatabase.zip>
2. Unzip the downloaded file



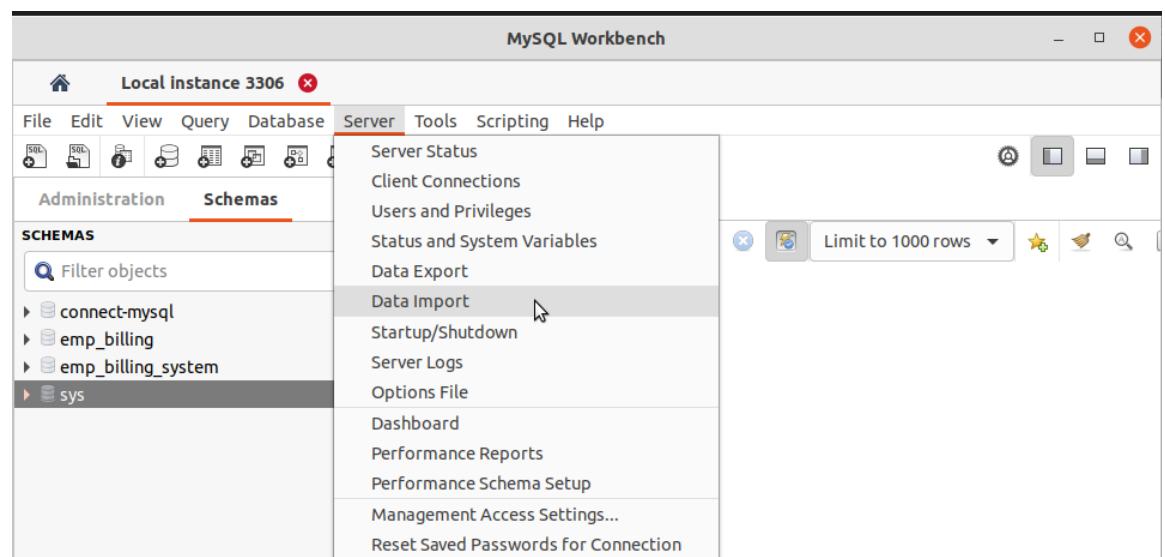
3. Using command prompt

- a. source c:/temp/mysqlsampledatabase.sql
- b. show databases;

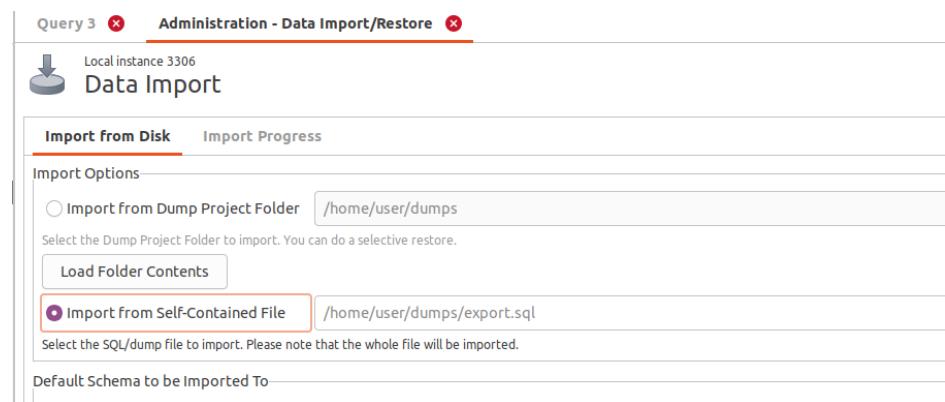
```
+-----+
| Database          |
+-----+
| classicmodels    |
| information_schema|
| mysql             |
| performance_schema|
| sys               |
+-----+
```

4. Using MySQL Workbench

- a. Open MySQL Workbench → Server → Data Import



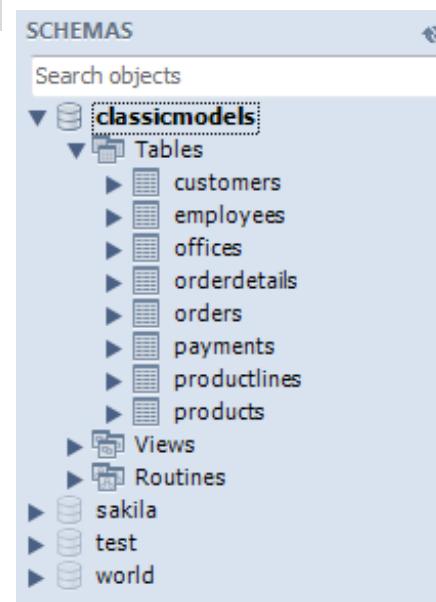
- b. Import from Self-Contained File



- c. Start Import

The sample database consists of the following:

- **Customers**: stores customer's data.
- **Products**: stores a list of scale model cars.
- **ProductLines**: stores a list of product line categories.
- **Orders**: stores sales orders placed by customers.
- **OrderDetails**: stores sales order line items for each sales order.
- **Payments**: stores payments made by customers based on their accounts.
- **Employees**: stores all employee information as well as the organization structure such as who reports to whom.
- **Offices**: stores sales office data.



Part 4: Basic SQL Commands

- SHOW DATABASES;
- USE classicmodels;
- SHOW TABLES;
- DESC customers;
- SELECT * FROM customers LIMIT 10;
- SELECT COUNT(*) FROM orders;

Student Exercises

1. Show all tables in the database
2. Describe employees table
3. Display first 5 products
4. Find customers from France