

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>



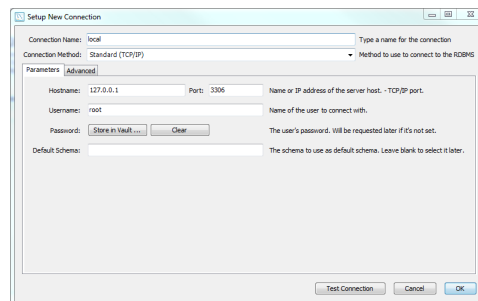
2. MySQL workbench

Hostname: localhost or 127.0.0.1

Port: 3306

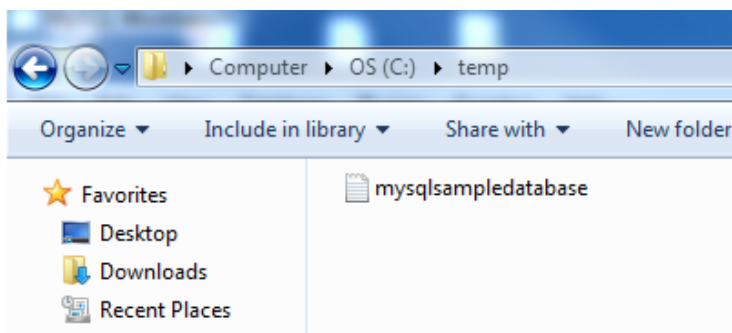
Username: root

Enter root password to connect



Part 3: Import Sample Database

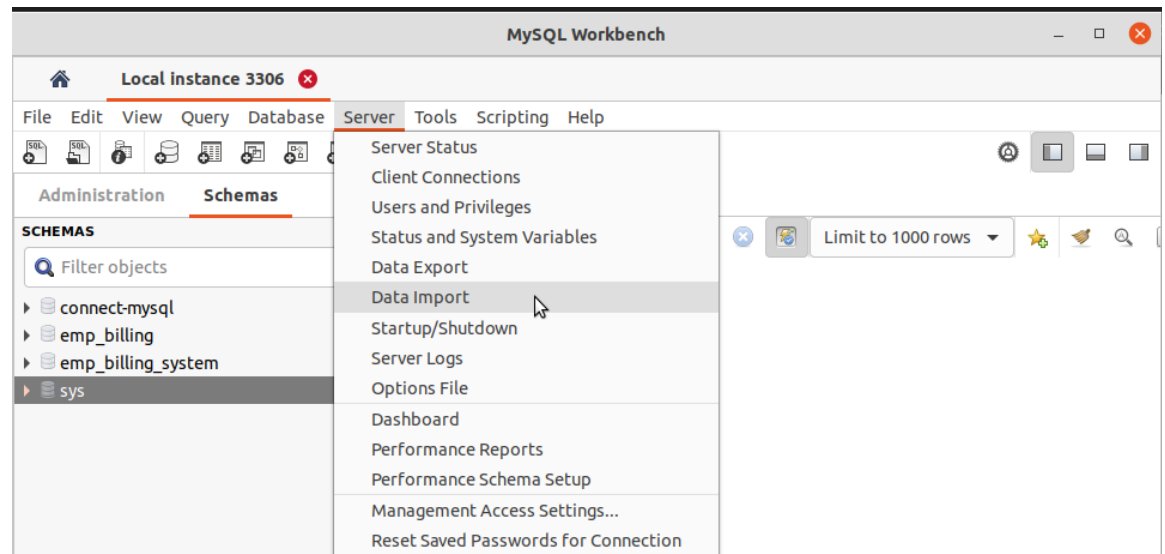
1. Download sample database: <https://www.mysqltutorial.org/wp-content/uploads/2023/10/mysqlsampledatabse.zip>
2. Unzip the downloaded file



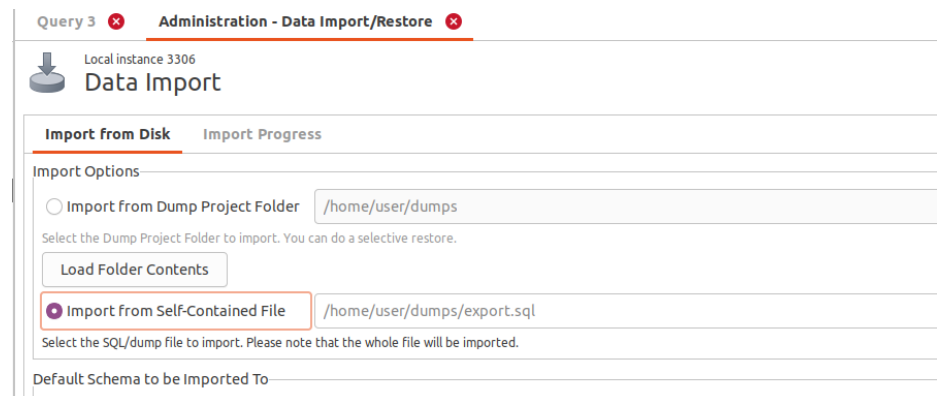
3. Using command prompt
 - a. source c:/temp/mysqlsampledatabase.sql
 - b. show databases;

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

4. Using MySQL Workbench
 - a. Open MySQL Workbench → Server → Data Import



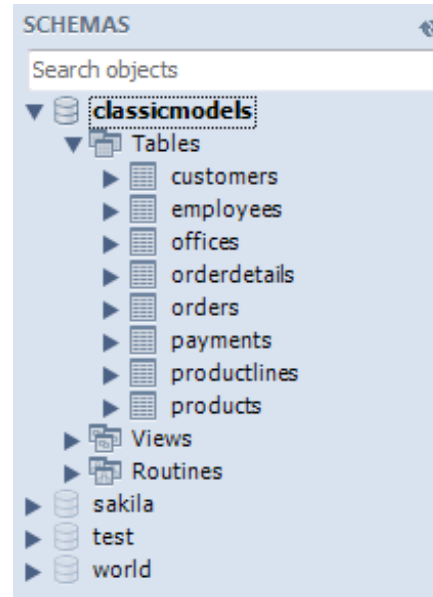
- b. Import from Self-Contained File



- 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