



Lab 5 – part 1

Creating Connection, Schema, Database

Done by : Eng. Asmaa Thabet



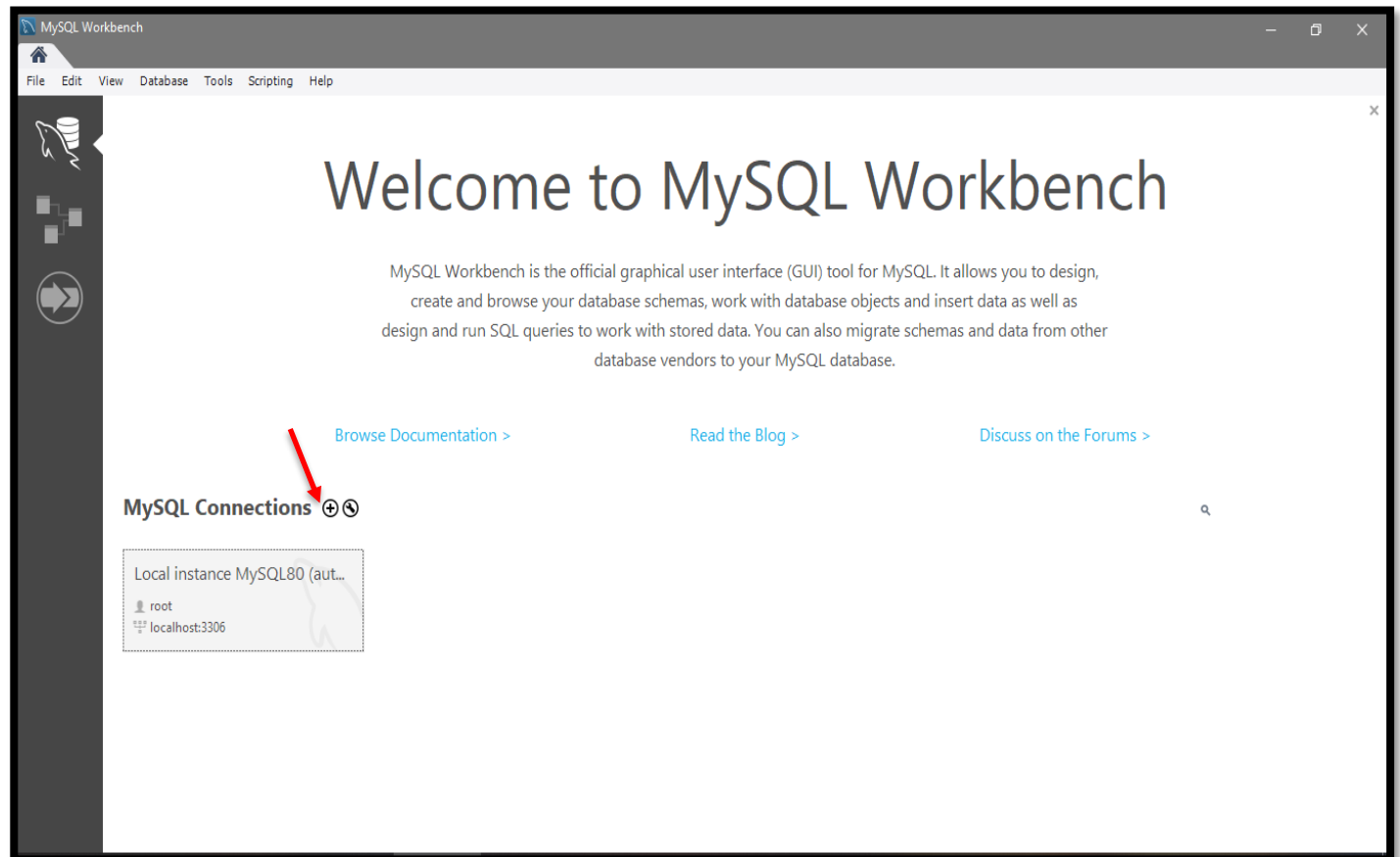
Objectives

After completing this lab, you should be able to do the following:

- Create a New connection in MySQL
- Create a Database / Schema in MYSQL
- Display all databases stored in MYSQL Server
- Use a specific database & show its tables.
- Delete a database
- Exercises

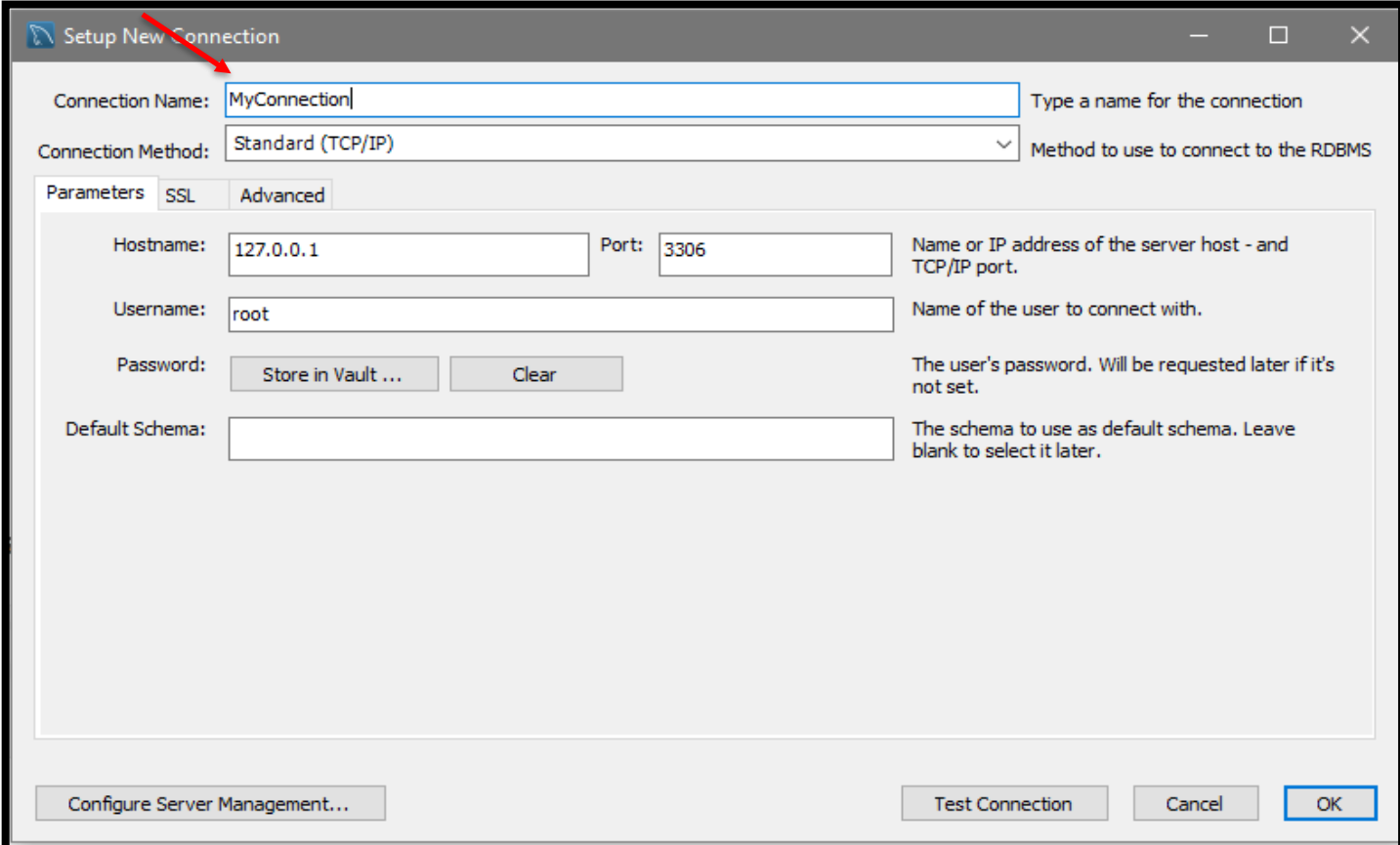
Creating New connection – Method 1 – S1

To create New Connection, press on the plus icon besides MySQL Connections word.



Creating New connection – Method 1 – S2

Name the new connection with the name you want , here I named it 'MyConnection' .



Setup New Connection

Connection Name: Type a name for the connection

Connection Method: Method to use to connect to the RDBMS

Parameters SSL Advanced

Hostname: Port: Name or IP address of the server host - and TCP/IP port.

Username: Name of the user to connect with.

Password: The user's password. Will be requested later if it's not set.

Default Schema: The schema to use as default schema. Leave blank to select it later.

Creating New connection – Method 1 – S3

Press on Test Connection icon to test your connection with MySQL server.

Setup New Connection

Connection Name: Type a name for the connection

Connection Method: Method to use to connect to the RDBMS

Parameters SSL Advanced

Hostname: Port: Name or IP address of the server host - and TCP/IP port.

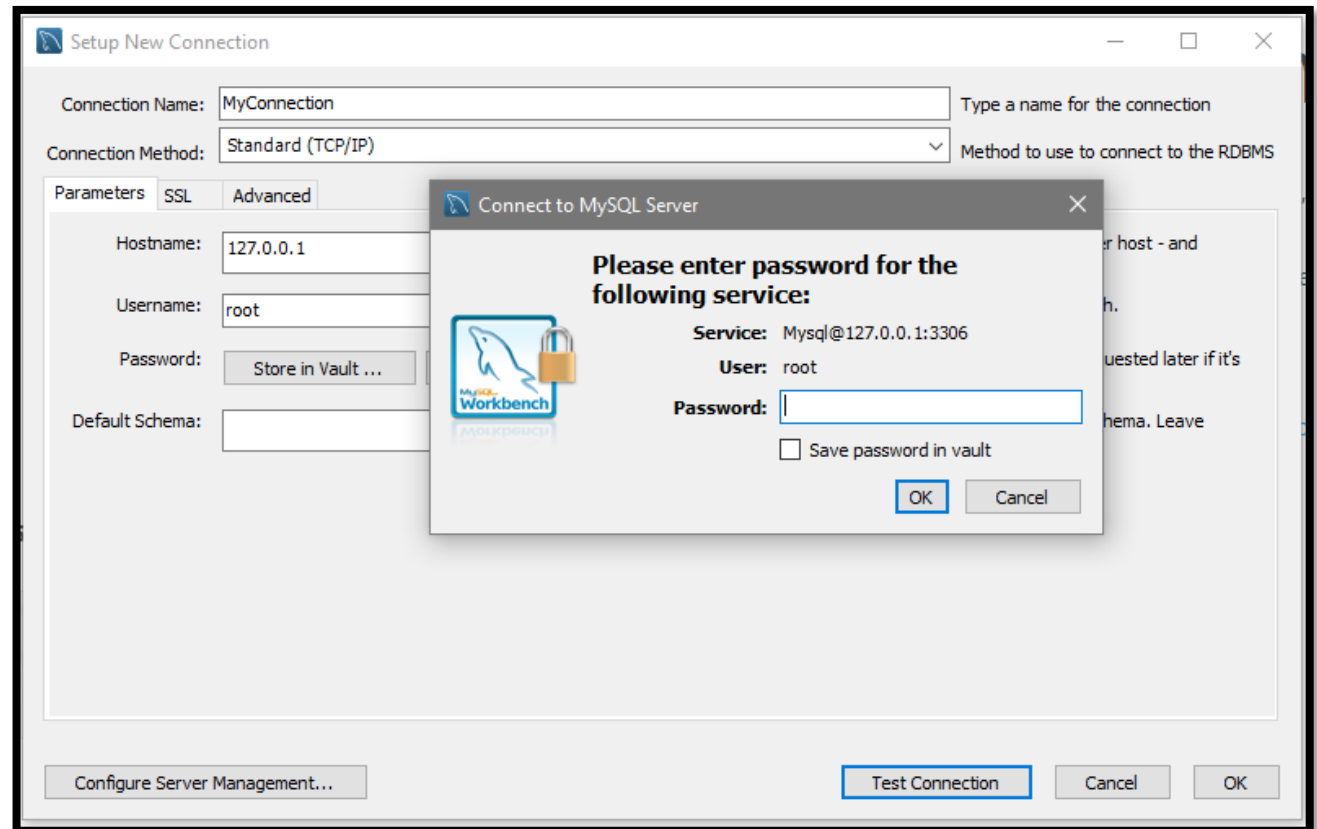
Username: Name of the user to connect with.

Password: The user's password. Will be requested later if it's not set.

Default Schema: The schema to use as default schema. Leave blank to select it later.

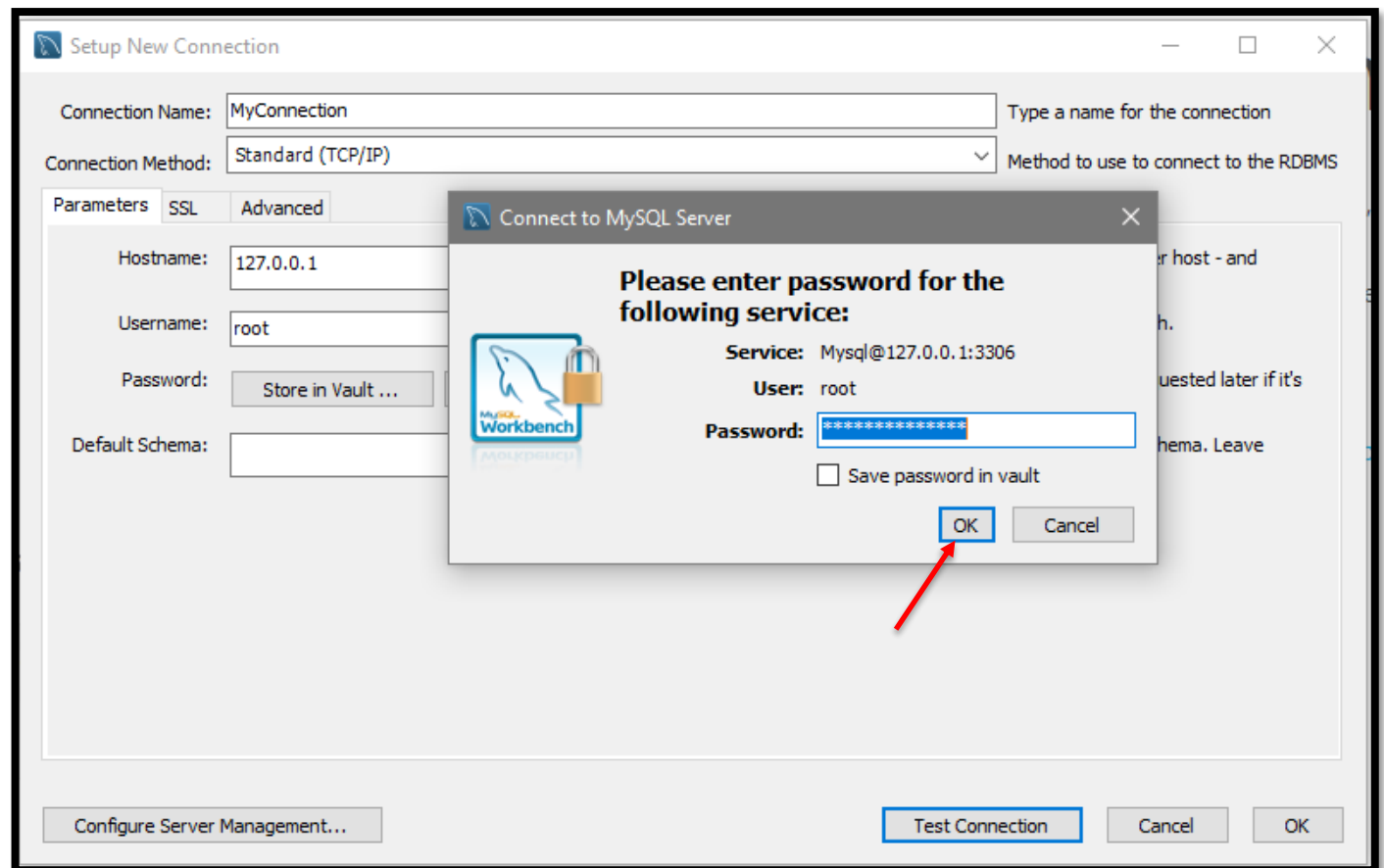
Creating New connection – Method 1 – S4

A pop up window will appear to you asking to enter your MYSQL password. Enter the Password that you used when installing the program.



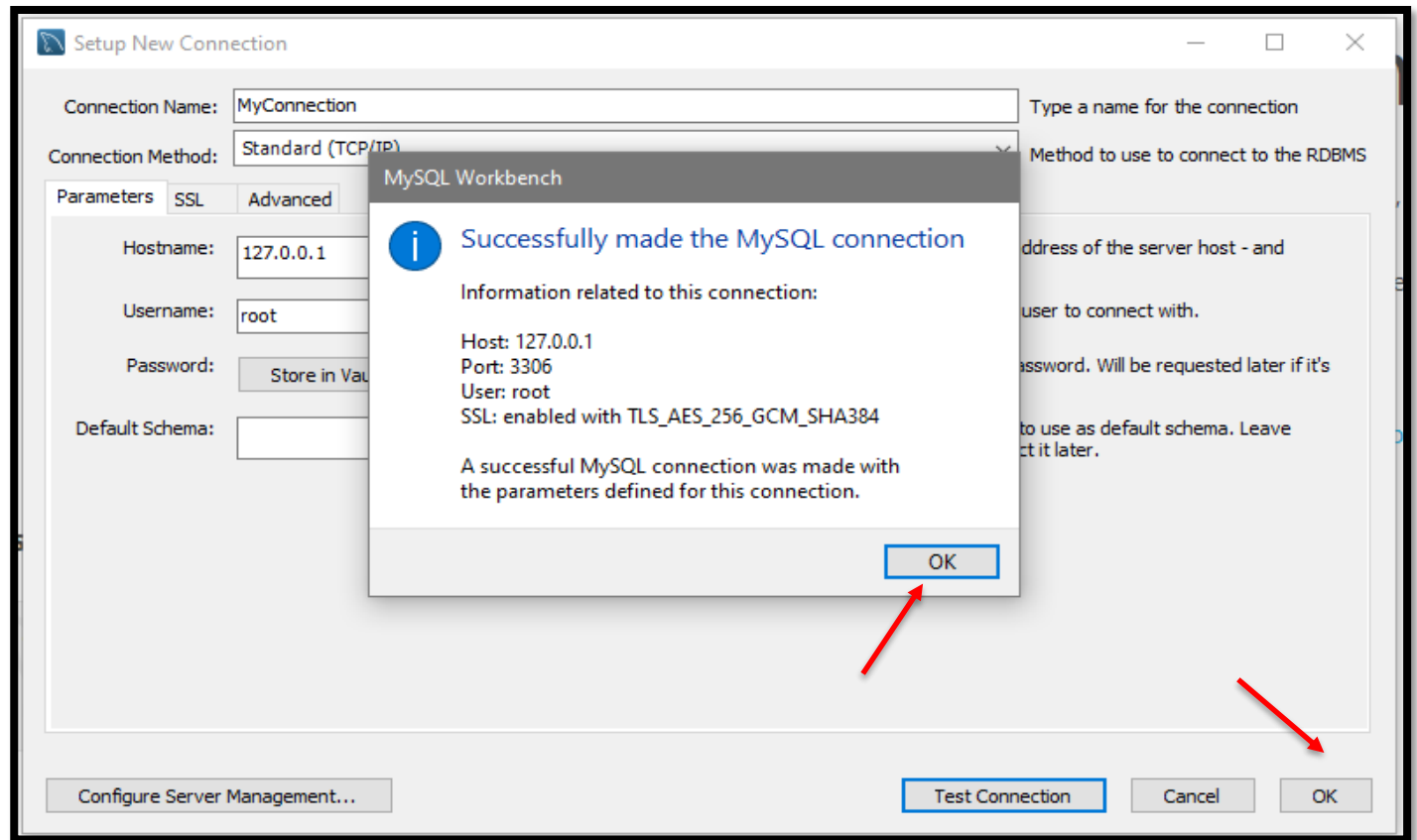
Creating New connection – Method 1 – S5

Then click ok.



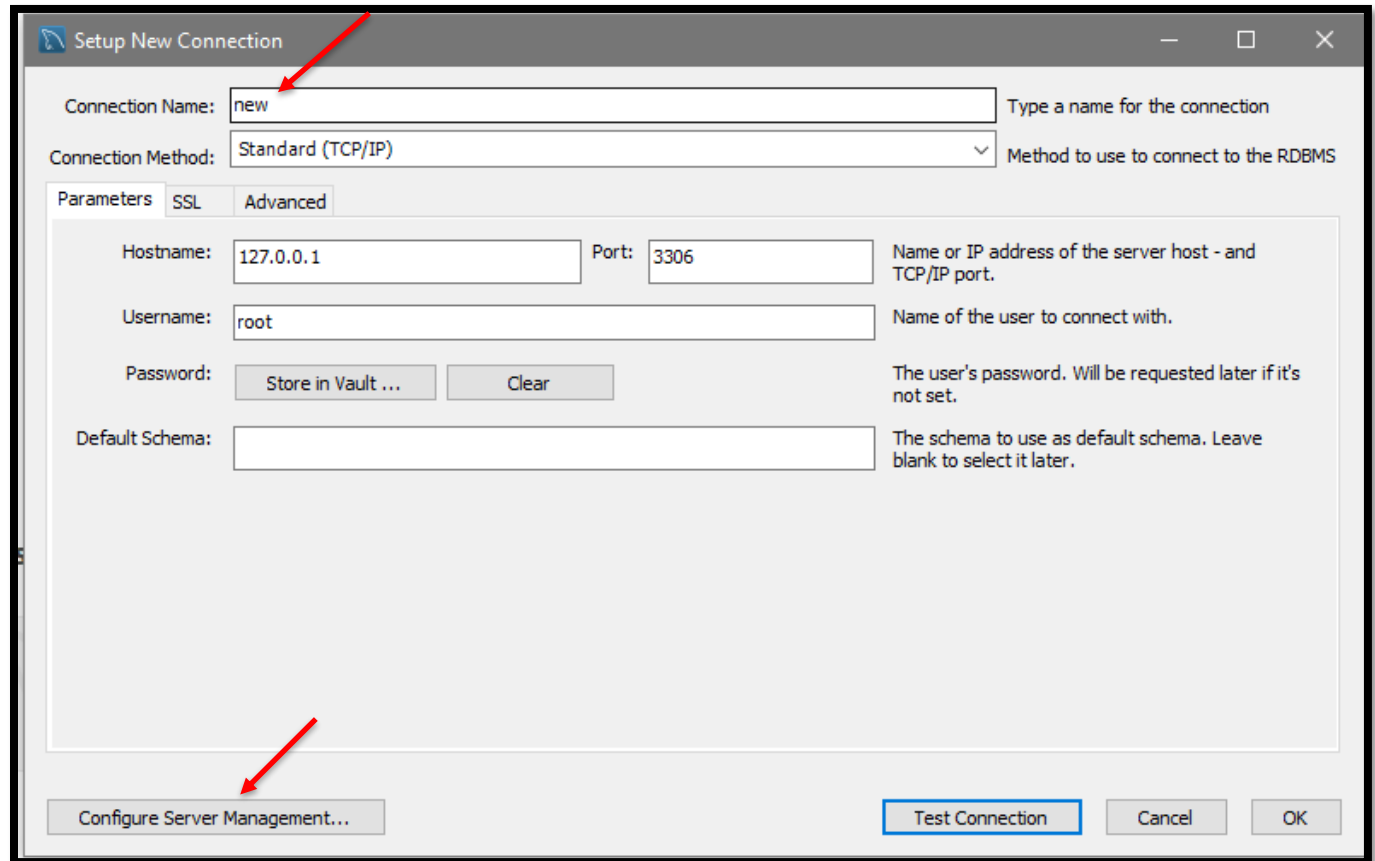
Creating New connection – Method 1 – S6

You will see another pop window that indicates successfully connection with MySQL if the password entered meet MySQL Password in your device.



Creating New connection – Method 2 – S1

Another way to test connection is to press on configure Server Management button after naming the connection by the name you want, here I named it as 'new' .



The screenshot shows the 'Setup New Connection' dialog box. The 'Connection Name' field is set to 'new'. The 'Connection Method' is set to 'Standard (TCP/IP)'. The 'Parameters' tab is selected, showing fields for 'Hostname' (127.0.0.1), 'Port' (3306), 'Username' (root), 'Password' (with 'Store in Vault ...' and 'Clear' buttons), and 'Default Schema'. The 'Test Connection' button is highlighted in blue. A red arrow points to the 'Connection Name' field, and another red arrow points to the 'Configure Server Management...' button.

Setup New Connection

Connection Name: Type a name for the connection

Connection Method: Method to use to connect to the RDBMS

Parameters SSL Advanced

Hostname: Port: Name or IP address of the server host - and TCP/IP port.

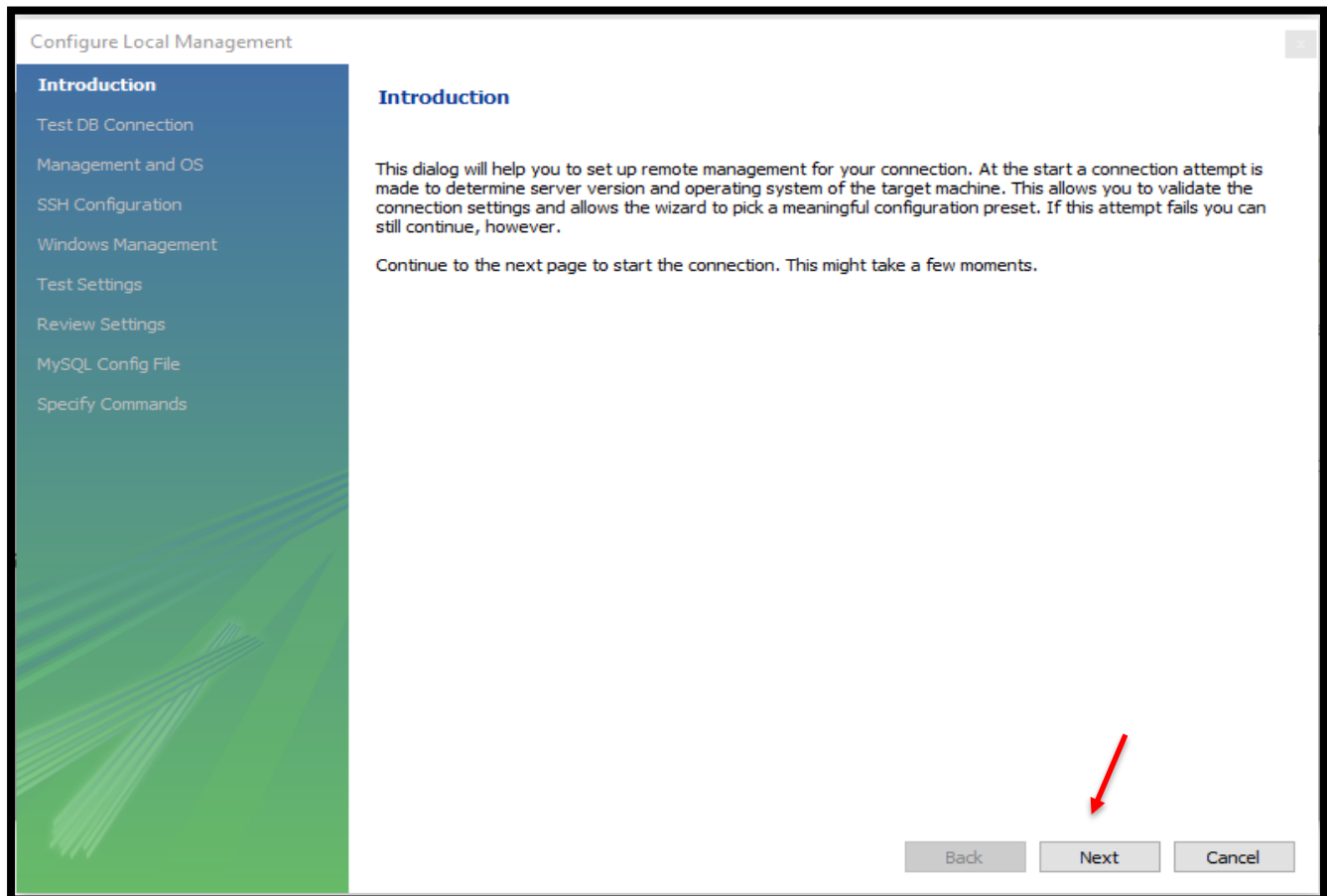
Username: Name of the user to connect with.

Password: The user's password. Will be requested later if it's not set.

Default Schema: The schema to use as default schema. Leave blank to select it later.

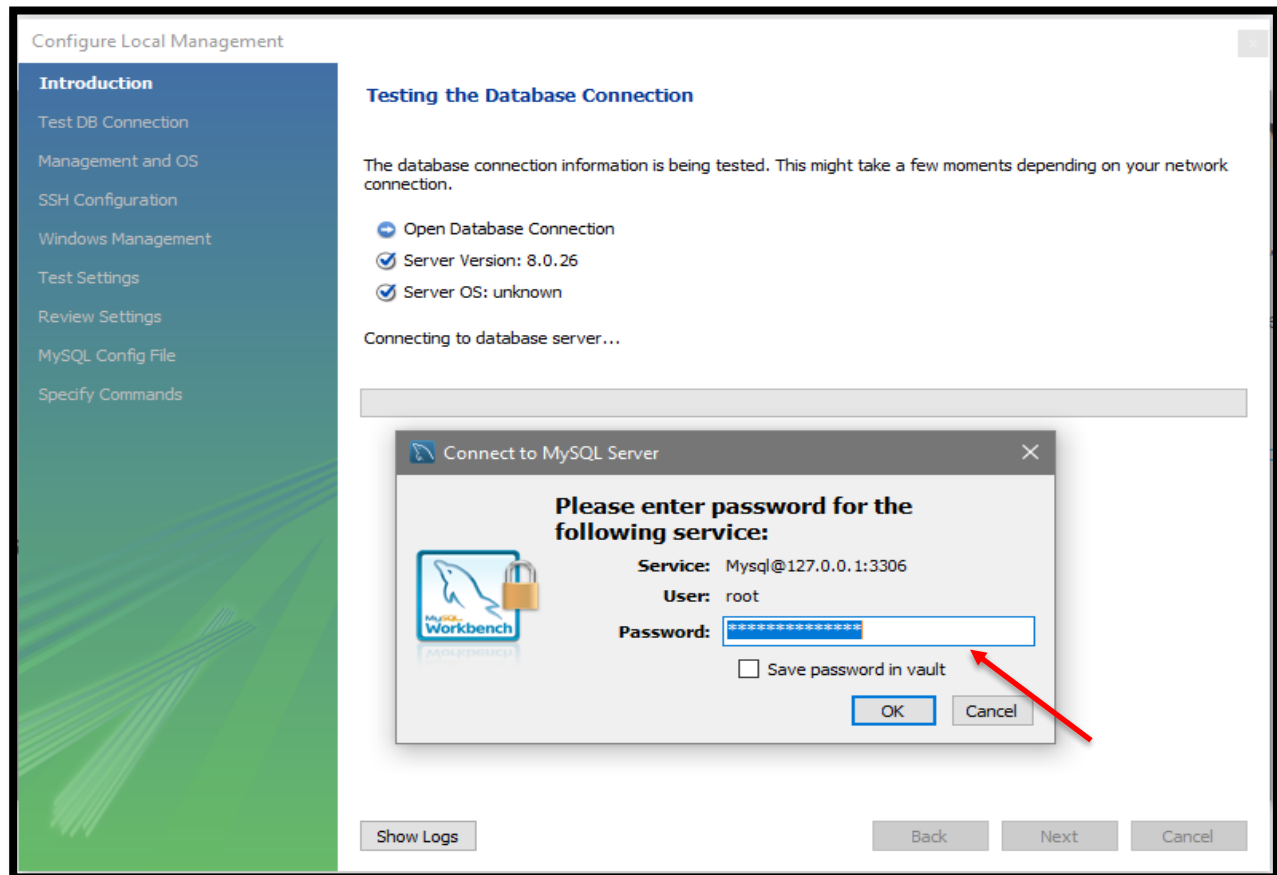
Creating New connection – Method 2 – S2

The configuration local Management Window will appear, just click on Next.



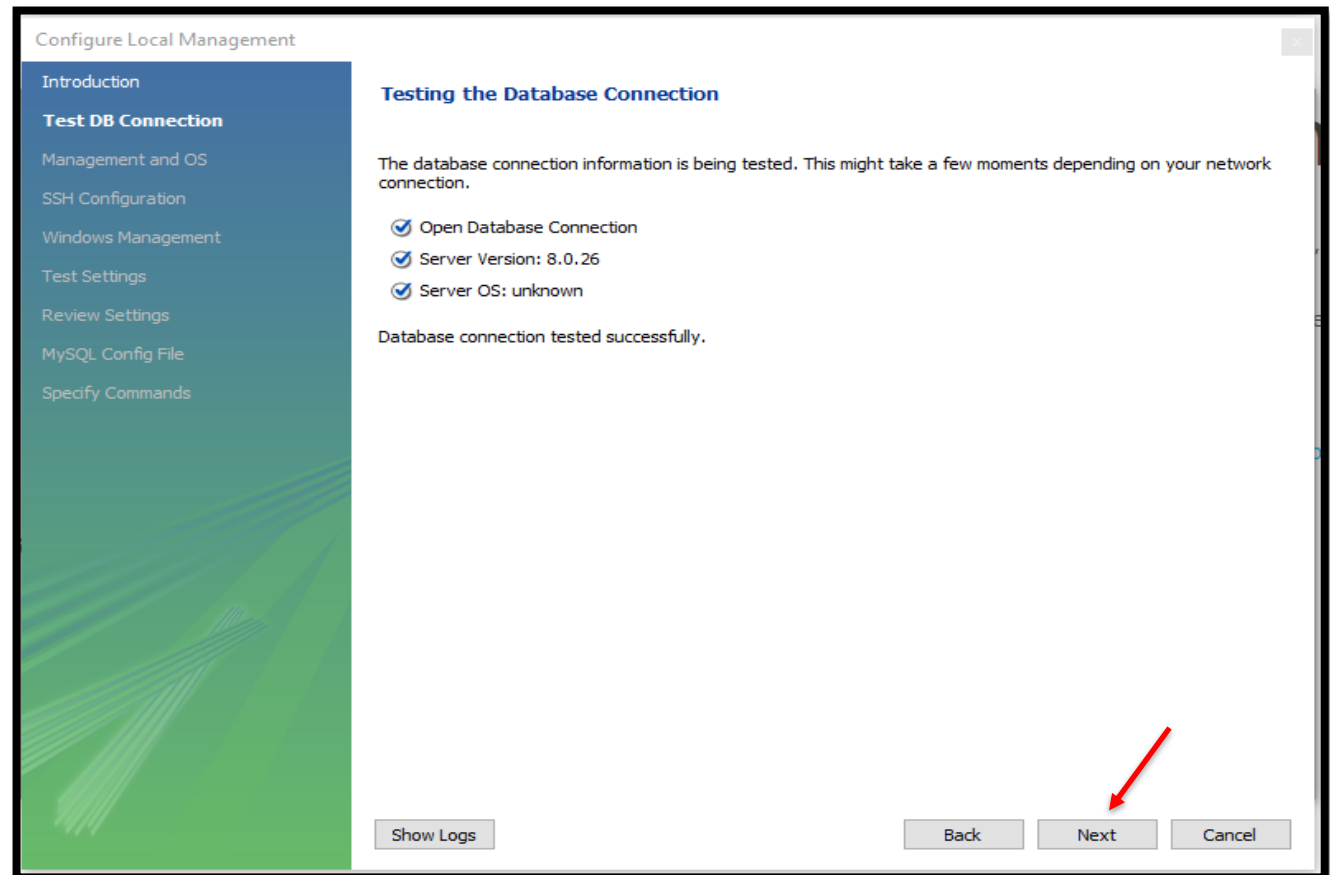
Creating New connection – Method 2 – S3

Enter your MySQL root password to test your connection with the server.



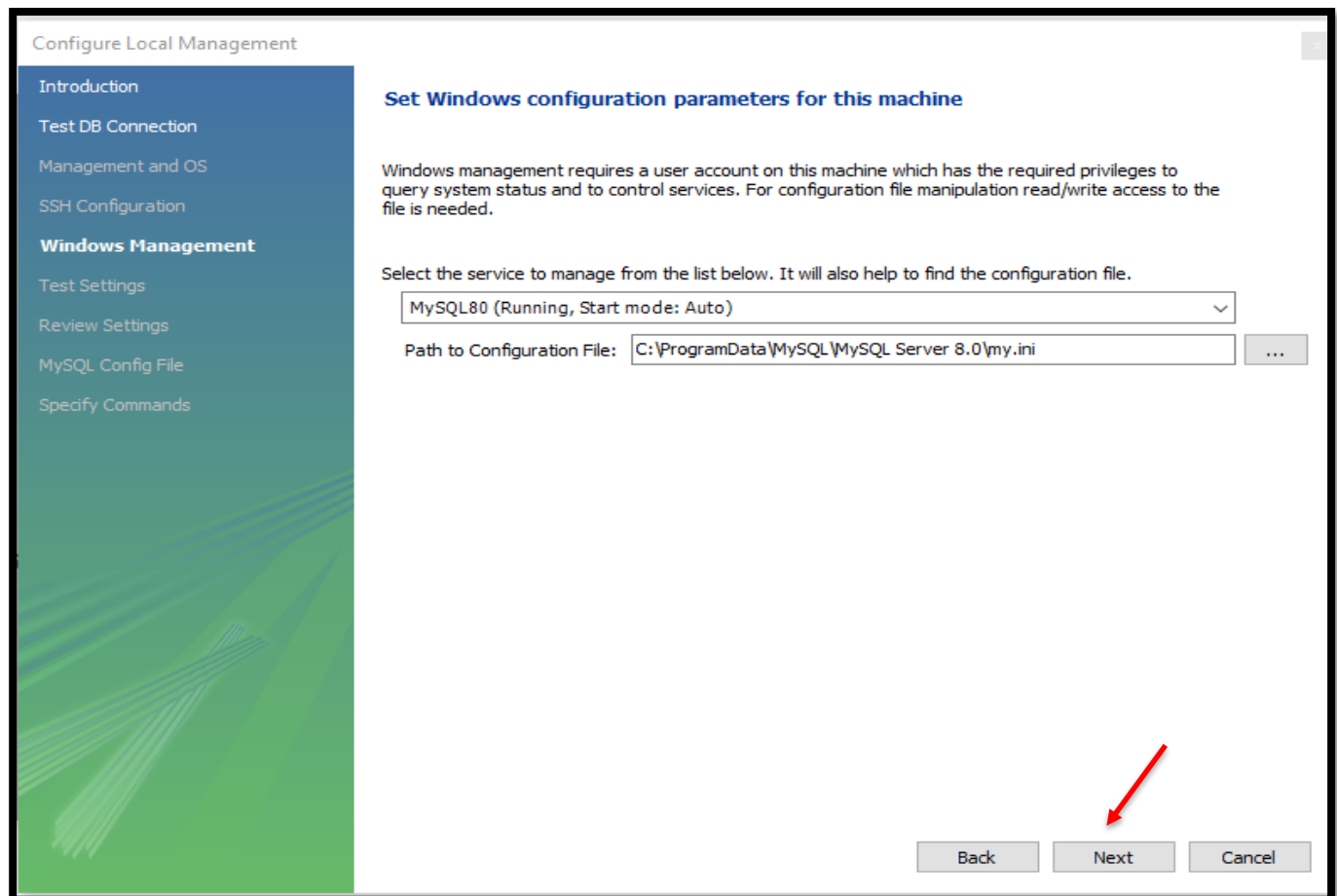
Creating New connection – Method 2 – S4

If your password match MySQL server one, the connection will establish successfully, click Next.



Creating New connection – Method 2 – S5

Click Next.



The screenshot shows a 'Configure Local Management' wizard window. On the left is a sidebar with a list of steps: Introduction, Test DB Connection, Management and OS, SSH Configuration, **Windows Management** (highlighted), Test Settings, Review Settings, MySQL Config File, and Specify Commands. The main area is titled 'Set Windows configuration parameters for this machine'. It contains a paragraph explaining that Windows management requires a user account with specific privileges. Below this is a text prompt: 'Select the service to manage from the list below. It will also help to find the configuration file.' A dropdown menu shows 'MySQL80 (Running, Start mode: Auto)'. Below the dropdown is a text field for 'Path to Configuration File' containing 'C:\ProgramData\MySQL\MySQL Server 8.0\my.ini', followed by an ellipsis button. At the bottom right are 'Back', 'Next', and 'Cancel' buttons. A red arrow points to the 'Next' button.

Configure Local Management

- Introduction
- Test DB Connection
- Management and OS
- SSH Configuration
- Windows Management**
- Test Settings
- Review Settings
- MySQL Config File
- Specify Commands

Set Windows configuration parameters for this machine

Windows management requires a user account on this machine which has the required privileges to query system status and to control services. For configuration file manipulation read/write access to the file is needed.

Select the service to manage from the list below. It will also help to find the configuration file.

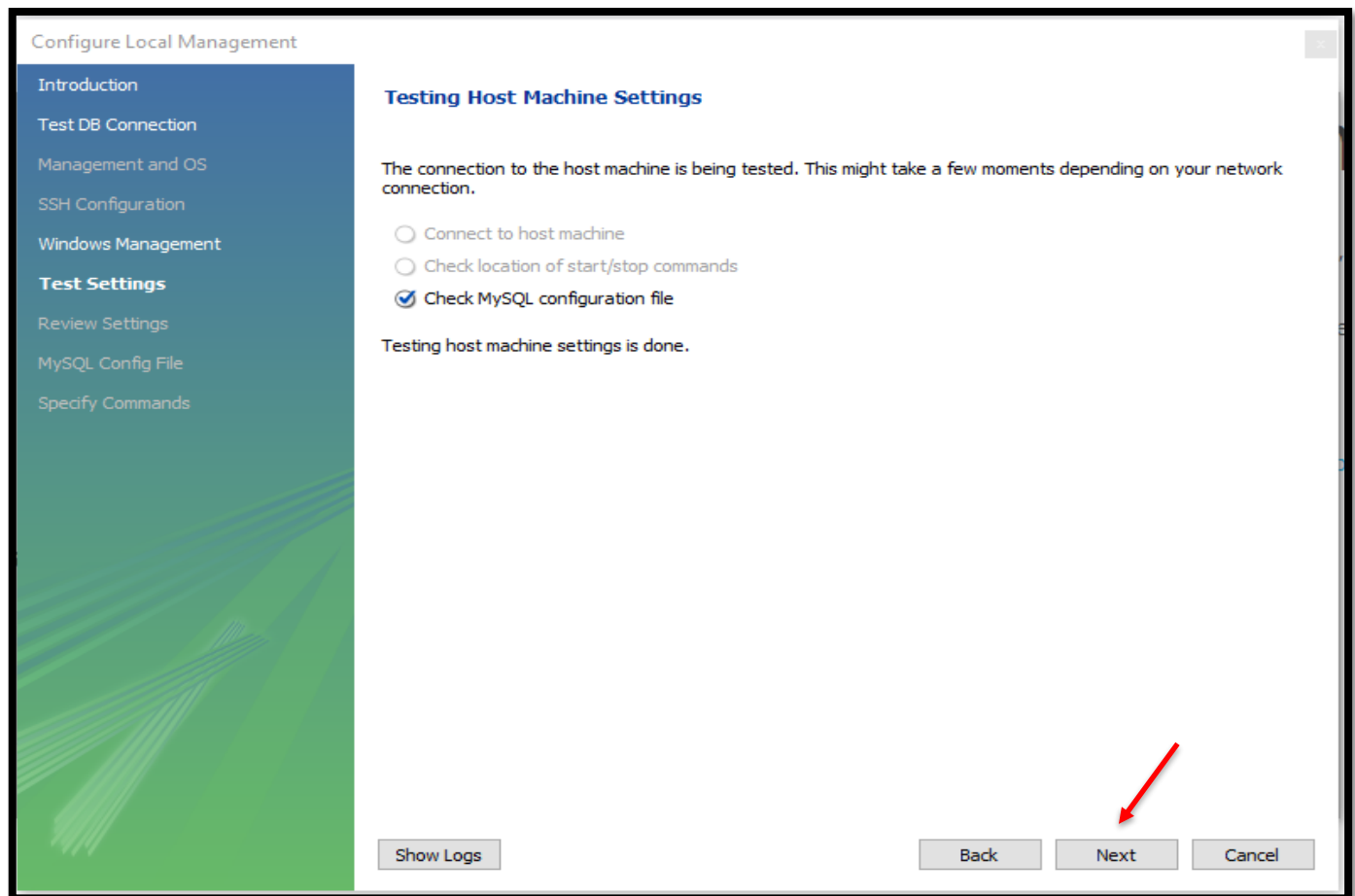
MySQL80 (Running, Start mode: Auto)

Path to Configuration File: C:\ProgramData\MySQL\MySQL Server 8.0\my.ini ...

Back Next Cancel

Creating New connection – Method 2 – S6

Click Next.



Configure Local Management

Introduction

Test DB Connection

Management and OS

SSH Configuration

Windows Management

Test Settings

Review Settings

MySQL Config File

Specify Commands

Testing Host Machine Settings

The connection to the host machine is being tested. This might take a few moments depending on your network connection.

☐ Connect to host machine

☐ Check location of start/stop commands

☒ Check MySQL configuration file

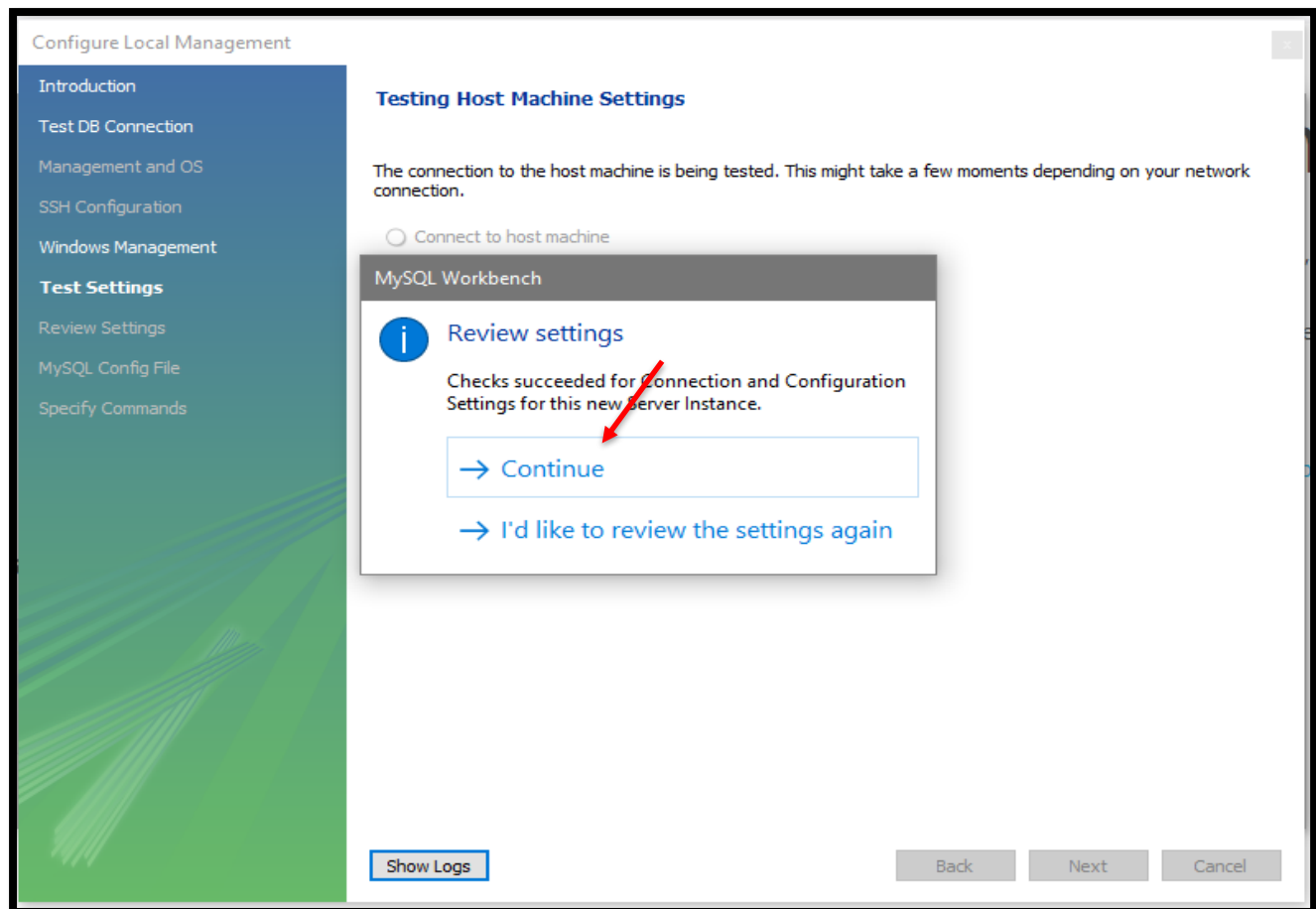
Testing host machine settings is done.

Show Logs

Back Next Cancel

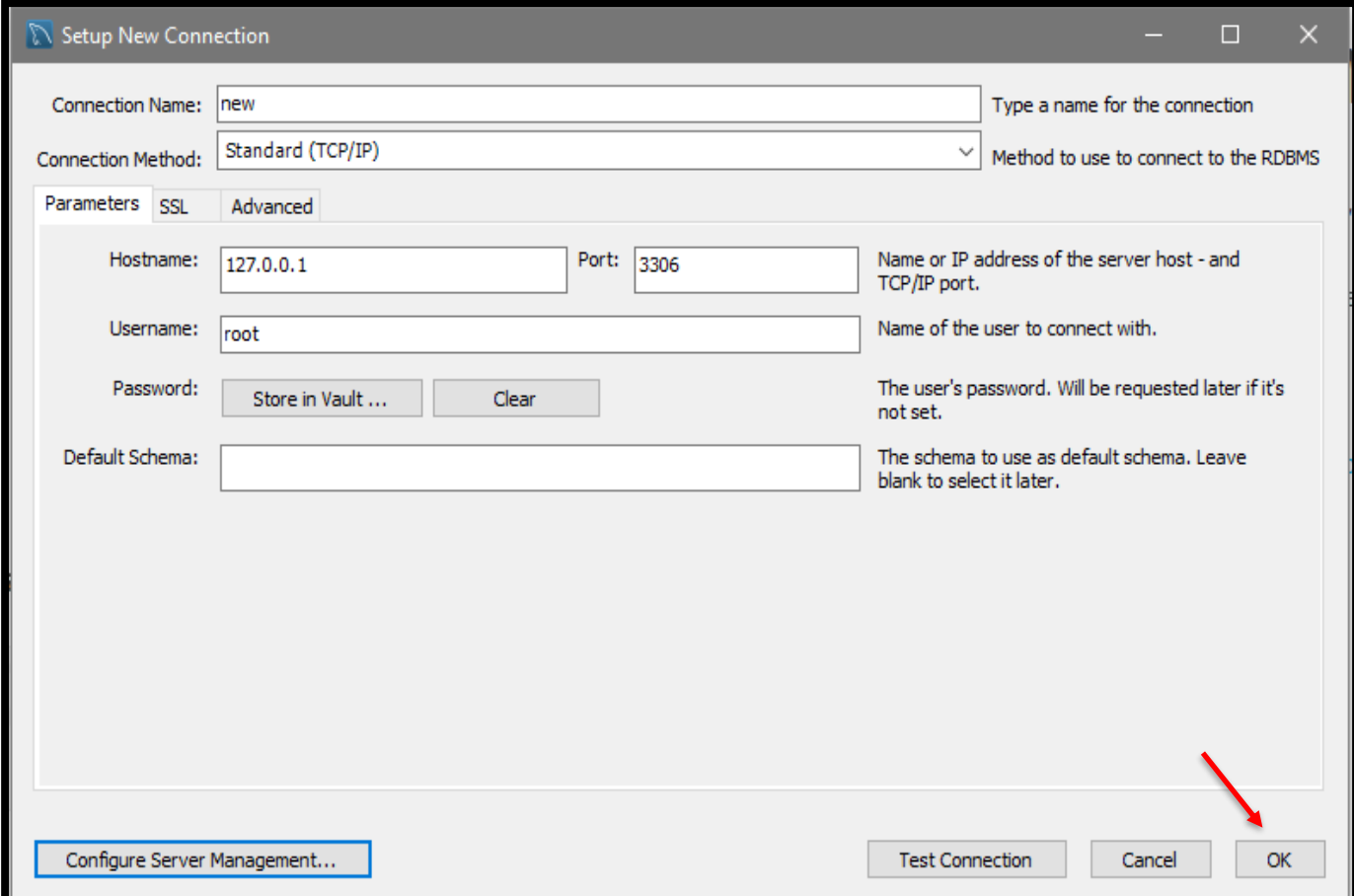
Creating New connection – Method 2 – S7

Click on Continue.



Creating New connection – Method 2 – S8

Then Press on OK.



Setup New Connection

Connection Name: Type a name for the connection

Connection Method: Method to use to connect to the RDBMS

Parameters SSL Advanced

Hostname: Port: Name or IP address of the server host - and TCP/IP port.

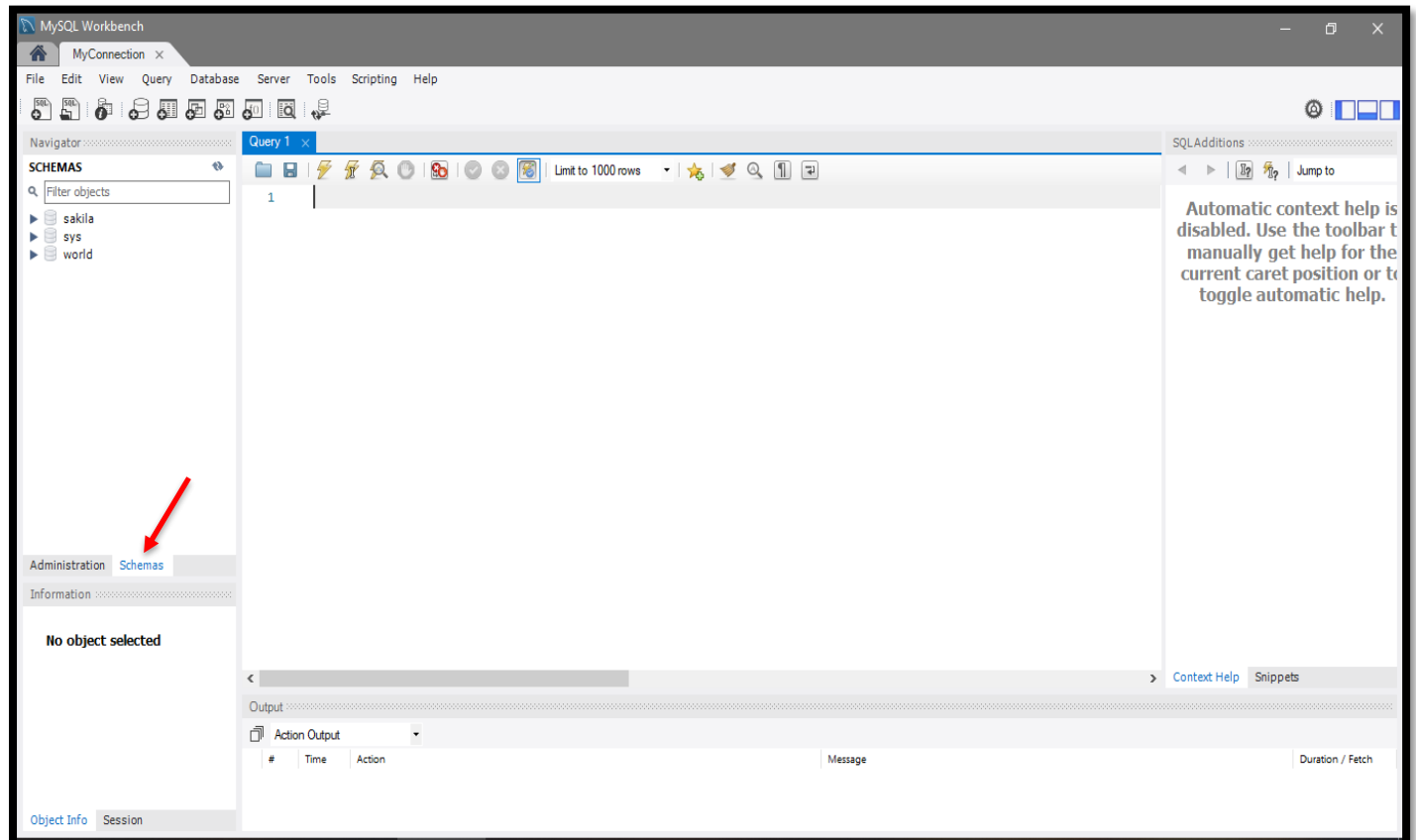
Username: Name of the user to connect with.

Password: The user's password. Will be requested later if it's not set.

Default Schema: The schema to use as default schema. Leave blank to select it later.

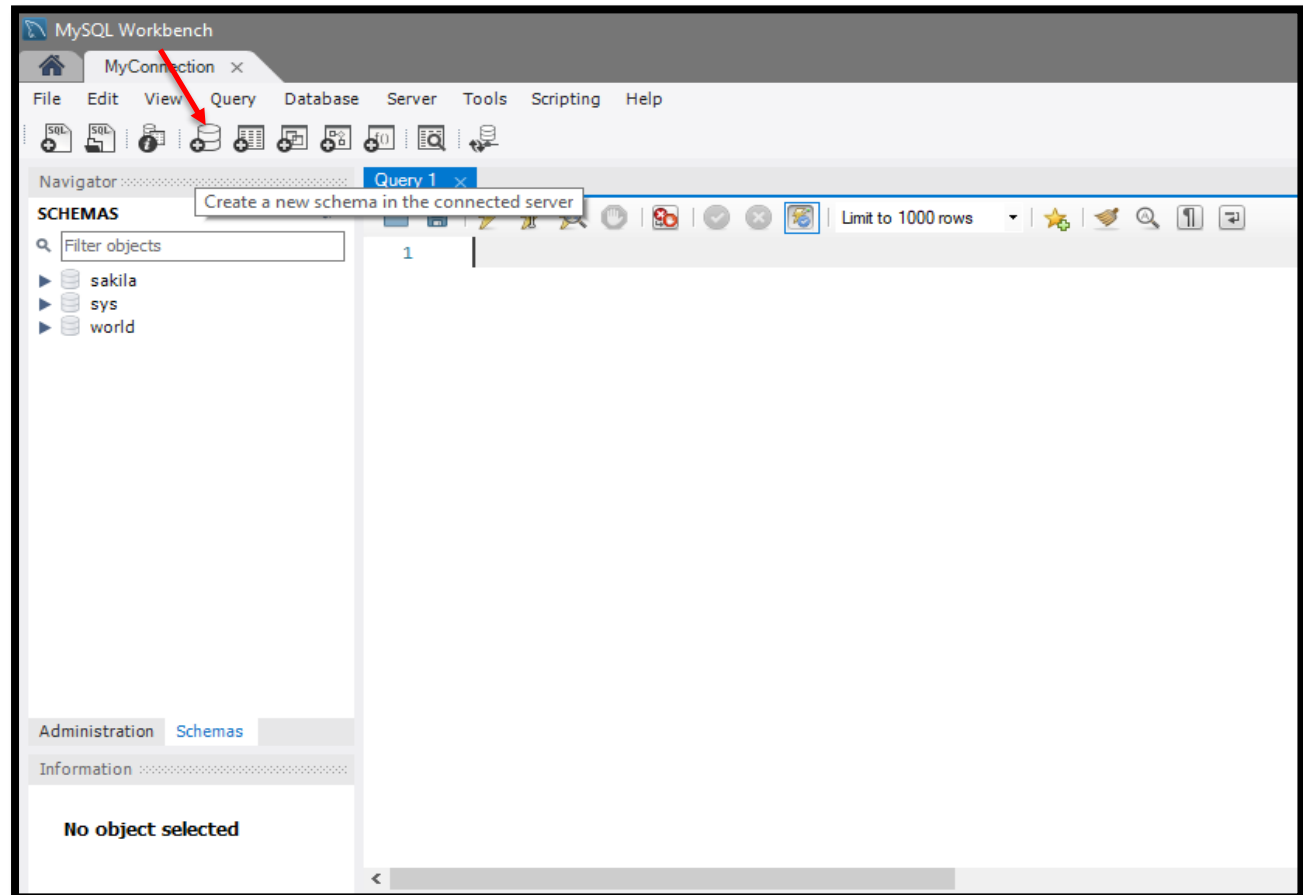
MySQL Workspace

MySQL workspace will be look like this shape, press on schemas tab that shows samples schemas installed.



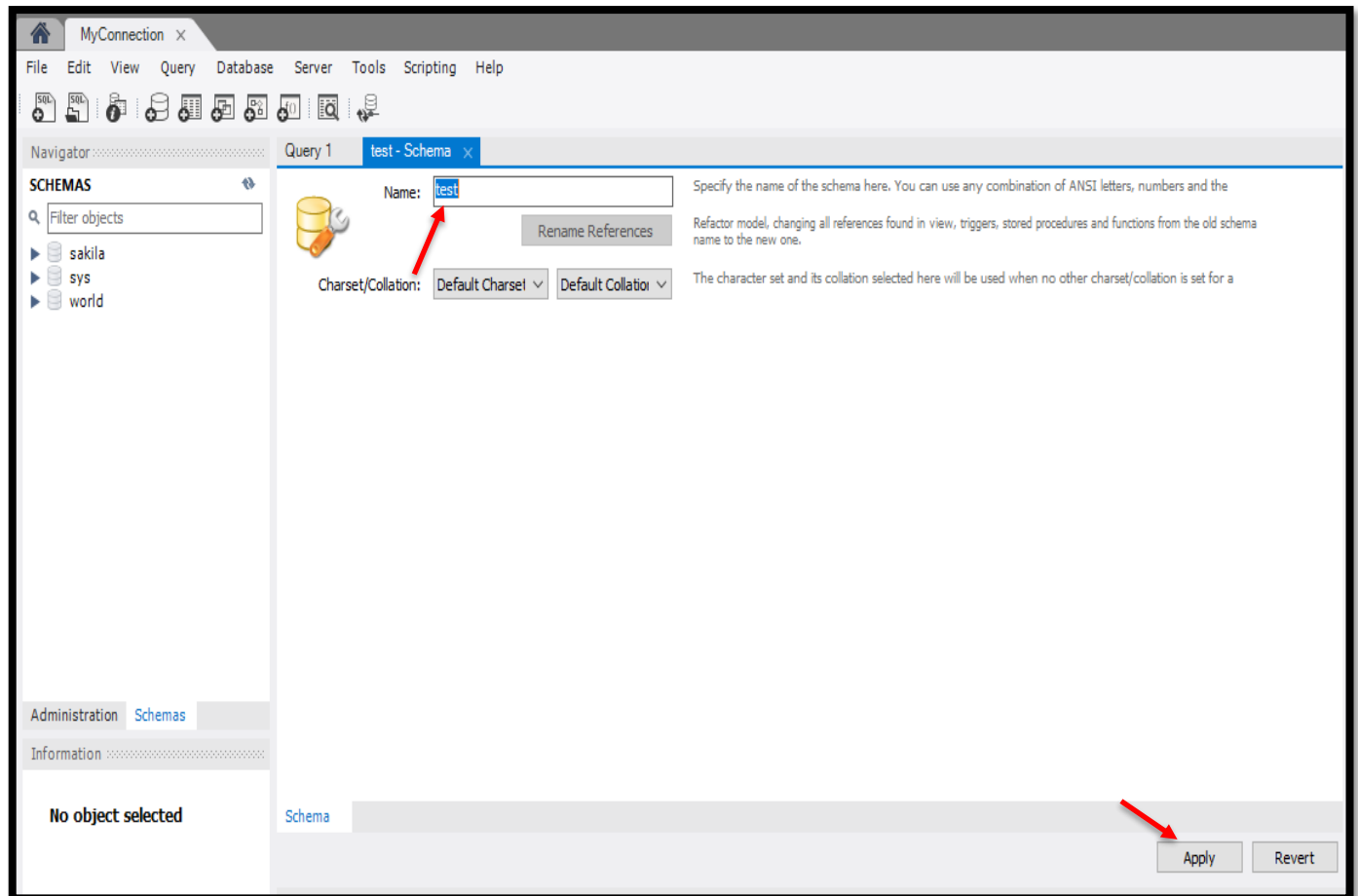
Creating New Schema/Database – Method 1 - S1

To create New Schema for Database, just click on schema icon in toolbar .



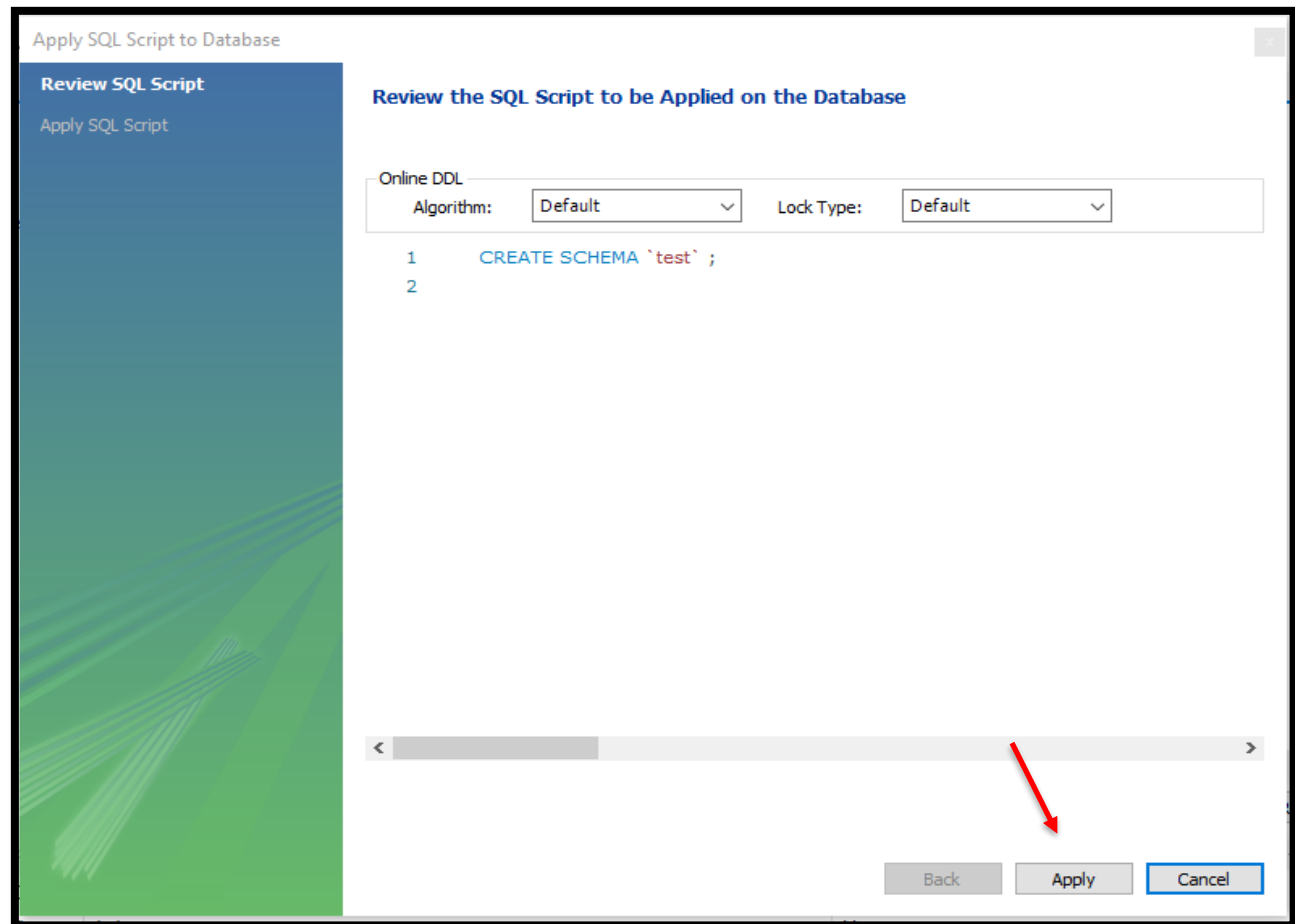
Creating New Schema/Database – Method 1 – S2

Name the schema by the name you want then click on Apply button below.



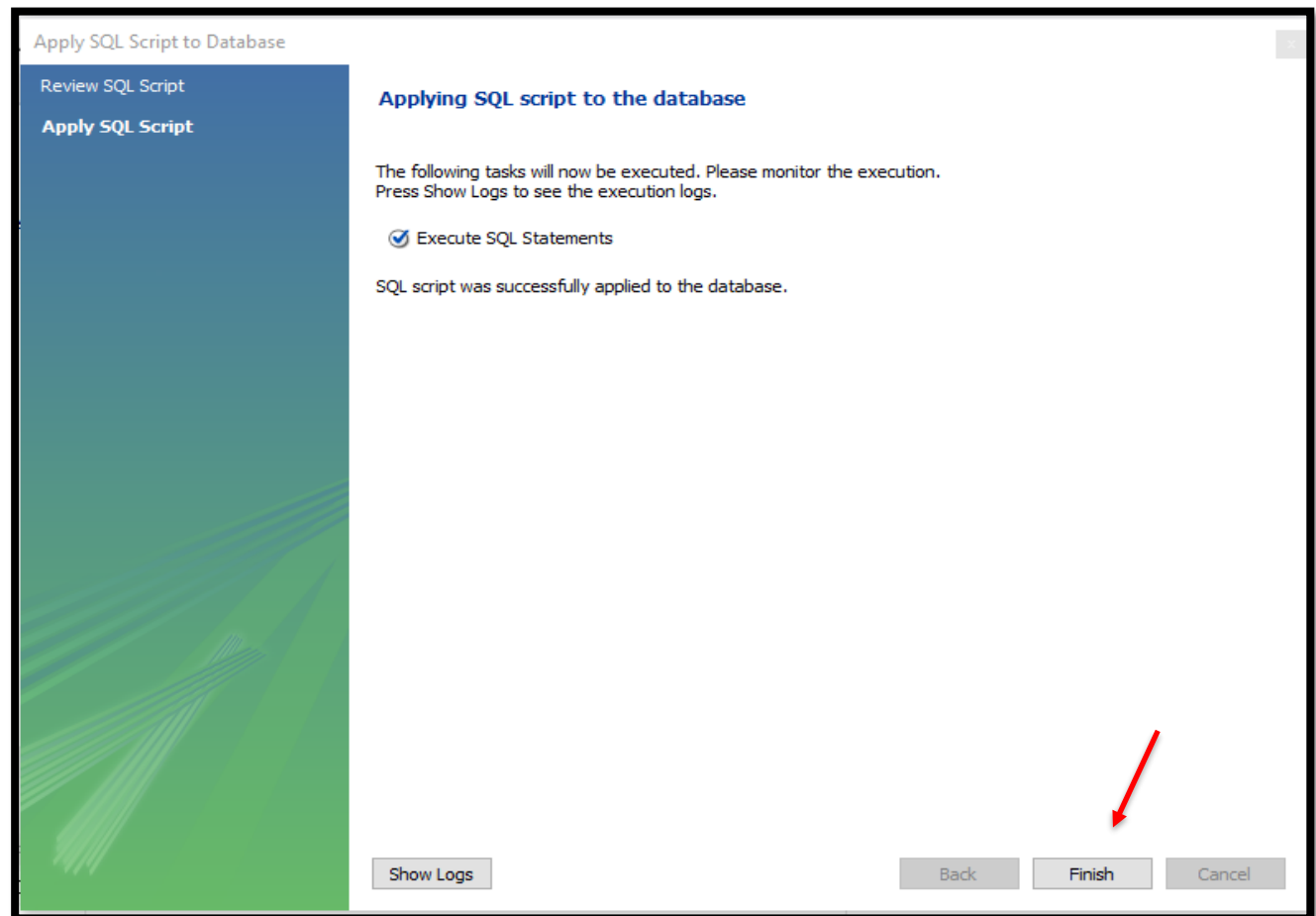
Creating New Schema/Database – Method 1 – S3

Apply window will displayed to show schema creation, click Apply.



Creating New Schema/Database – Method 1 – S4

After Schema Successfully created, click Finish.



Creating New Schema/Database – Method 1 – S5

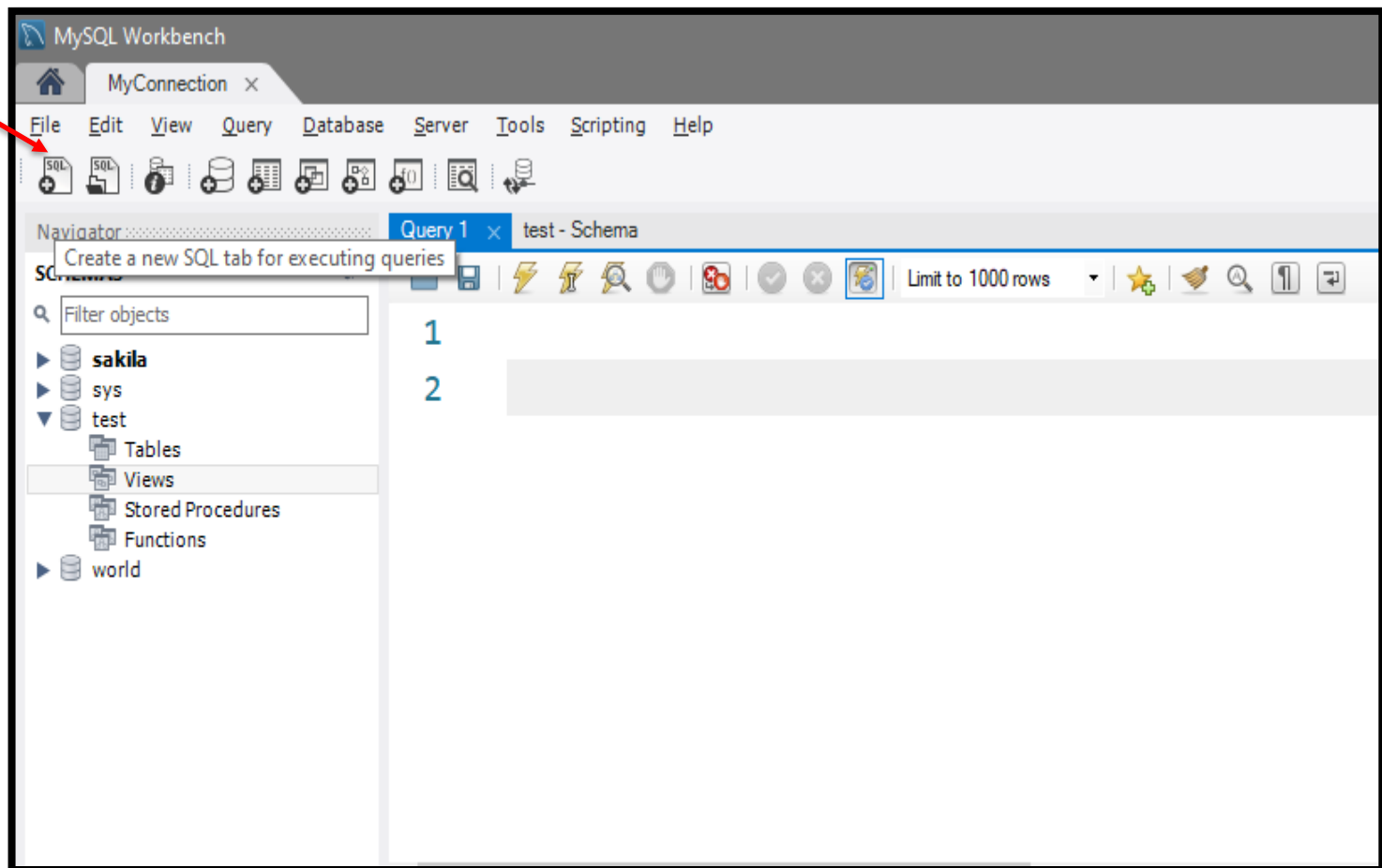
The Action Output below shows that changes was applied to the created schema, and the new schema will be seen in schemas list.

The screenshot displays the SQL Server Enterprise Manager interface. On the left, the 'SCHEMAS' tree view shows a list of schemas: 'sakila', 'sys', 'test', and 'world'. A red arrow points to the 'test' schema. The main pane shows the 'test - Schema' configuration. The 'Name' field is set to 'test'. Below it, the 'Charset/Collation' is set to 'Default Charset' and 'Default Collation'. The 'Output' pane at the bottom shows the 'Action Output' table with the following data:

#	Time	Action	Message
1	21:19:49	Apply changes to test	Changes applied

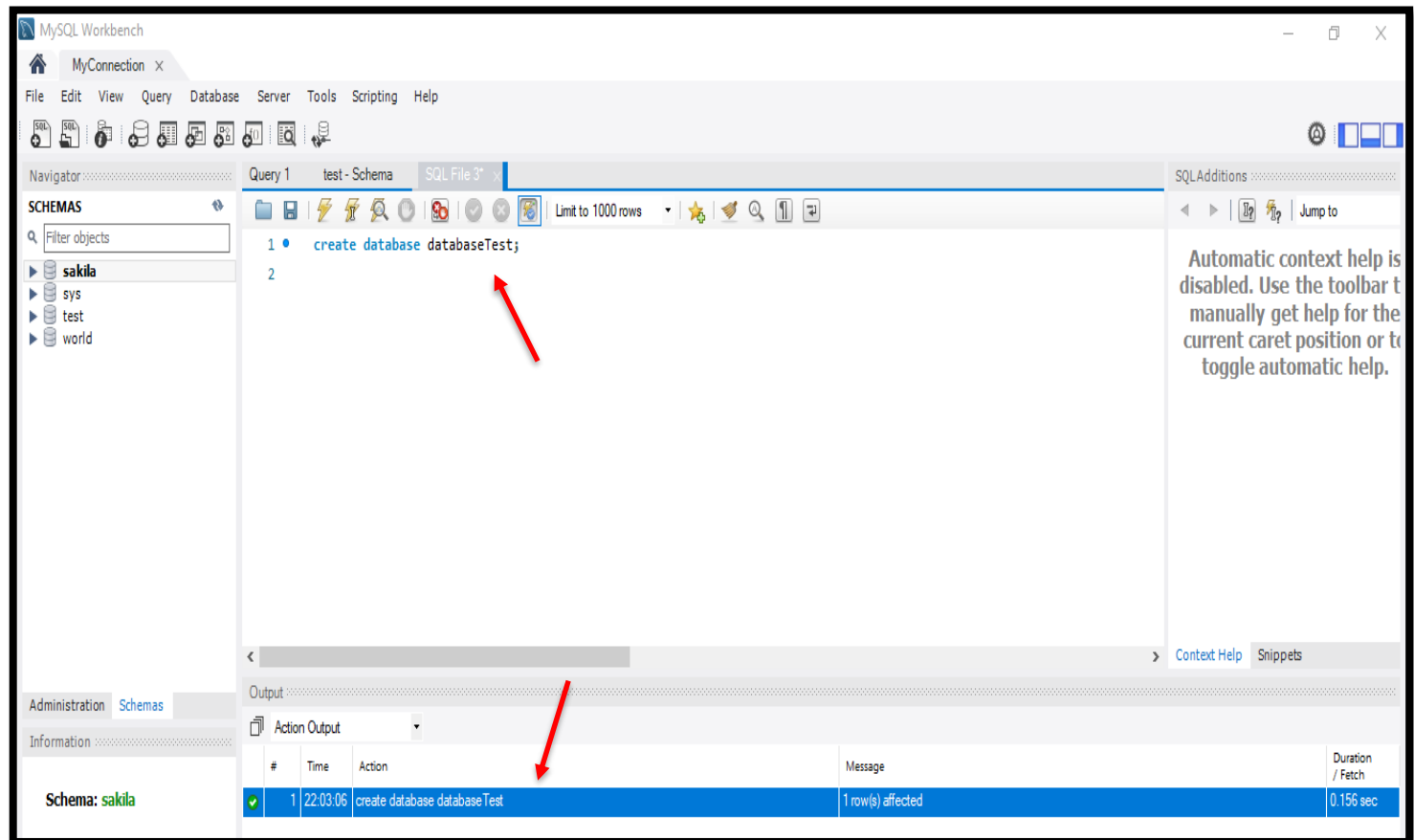
Creating New Schema/Database – Method 2 – S1

Open a new SQL file by clicking in its icon .



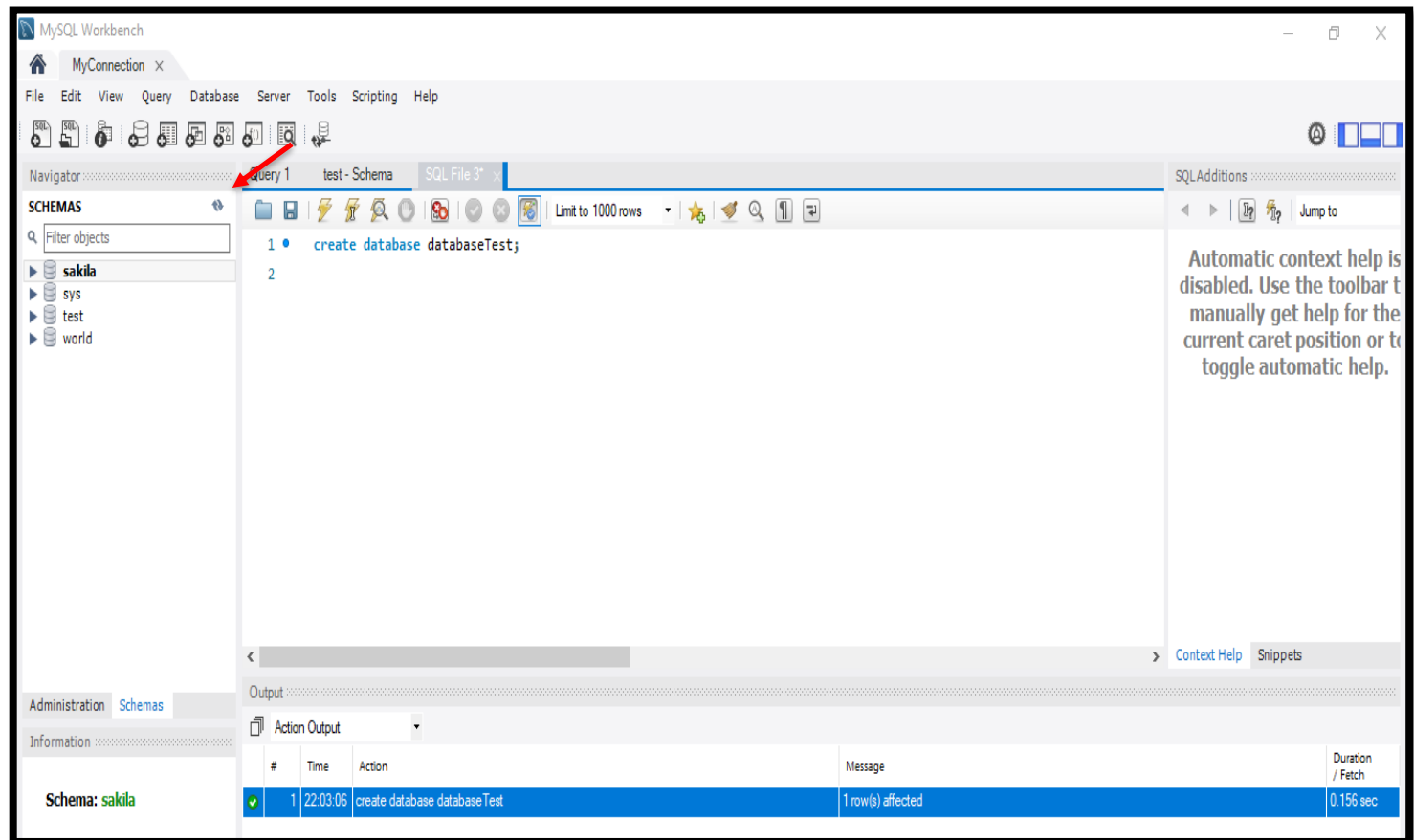
Creating New Schema/Database – Method 2 – S2

Type Database creation command with name of the new database you want to create.



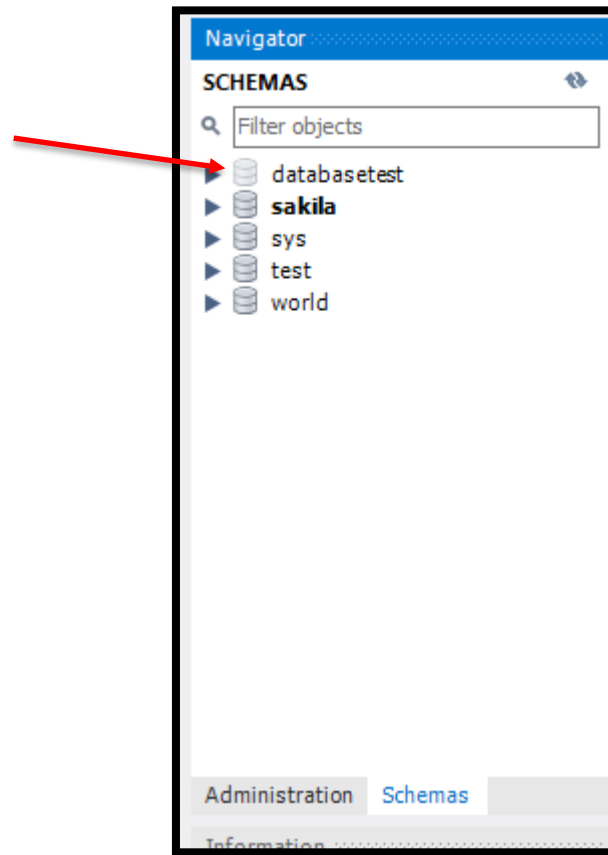
Creating New Schema/Database – Method 2 – S3

Refresh your schemas by clicking on refreshing icon.



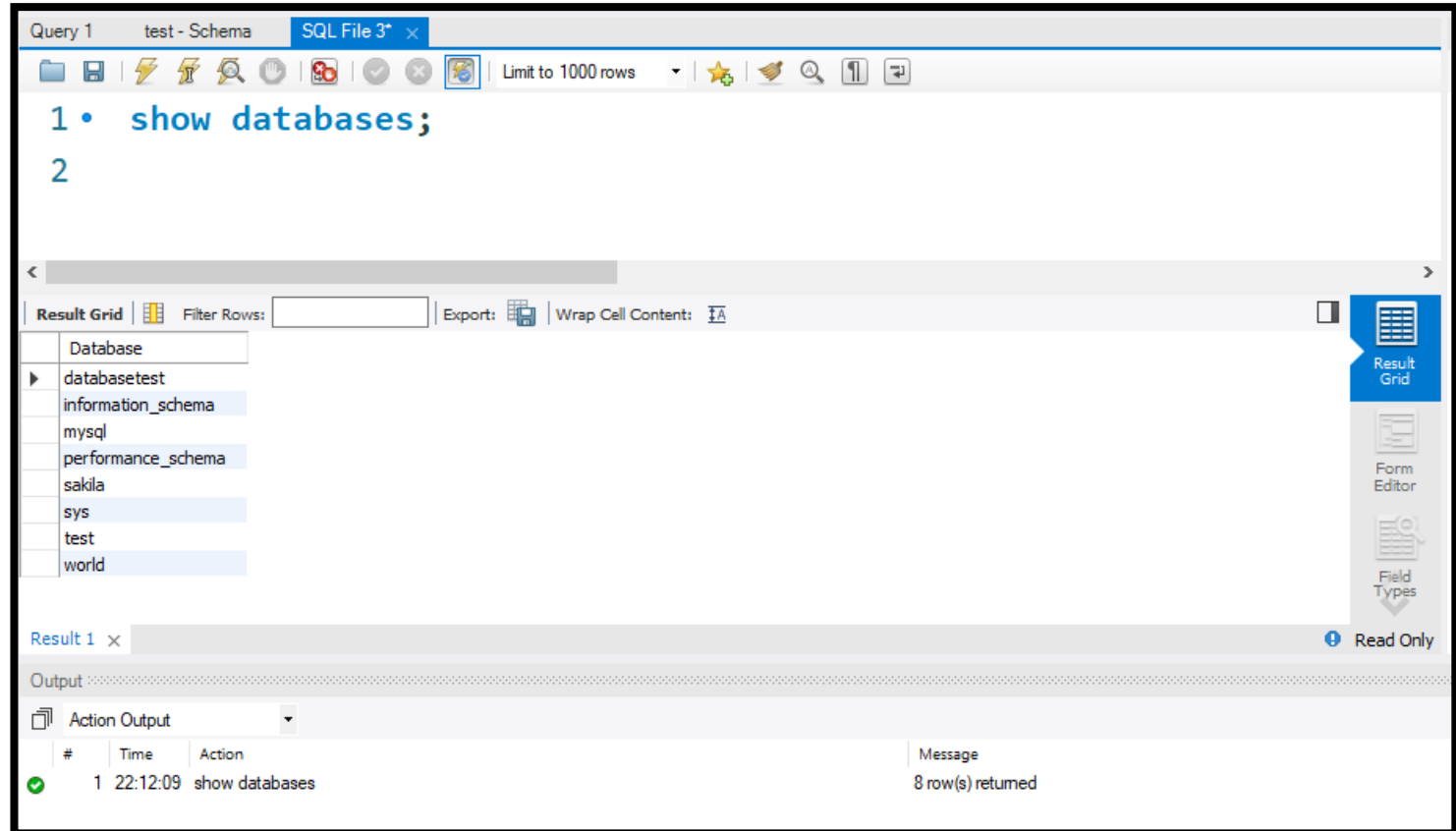
Creating New Schema/Database – Method 2 – S4

- Your schemas will be like this and the new schema/database will appear, you have to notice that the name of the database will be in small case.



Display All Databases

- To see all databases stored in your server, just type: **Show databases command.**



The screenshot shows a SQL client interface with a query editor and a results pane. The query editor contains the command `show databases;`. The results pane displays a list of databases: `database`, `datasetest`, `information_schema`, `mysql`, `performance_schema`, `sakila`, `sys`, `test`, and `world`. The results are displayed in a table format with columns for Database, Name, and Collation.

Database	Name	Collation
datasetest	datasetest	utf8mb4_0900_ai_ci
information_schema	information_schema	utf8mb4_0900_ai_ci
mysql	mysql	utf8mb4_0900_ai_ci
performance_schema	performance_schema	utf8mb4_0900_ai_ci
sakila	sakila	utf8mb4_0900_ai_ci
sys	sys	utf8mb4_0900_ai_ci
test	test	utf8mb4_0900_ai_ci
world	world	utf8mb4_0900_ai_ci

The interface also shows a command log at the bottom with the following entry:

#	Time	Action	Message
1	22:12:09	show databases	8 row(s) returned

Use a specific database

- To see a specific database just type its name after use command: **use [Name of the Database]**

The screenshot shows a database management tool interface. On the left, the 'SCHEMAS' panel lists available databases: **databasetest**, sakila, sys, test, and world. The 'test' database is selected. The main query editor displays the following SQL commands:

```
1 • show databases;  
2 • use databasetest;  
3
```

The 'Result Grid' shows the output of the first command, listing the available databases:

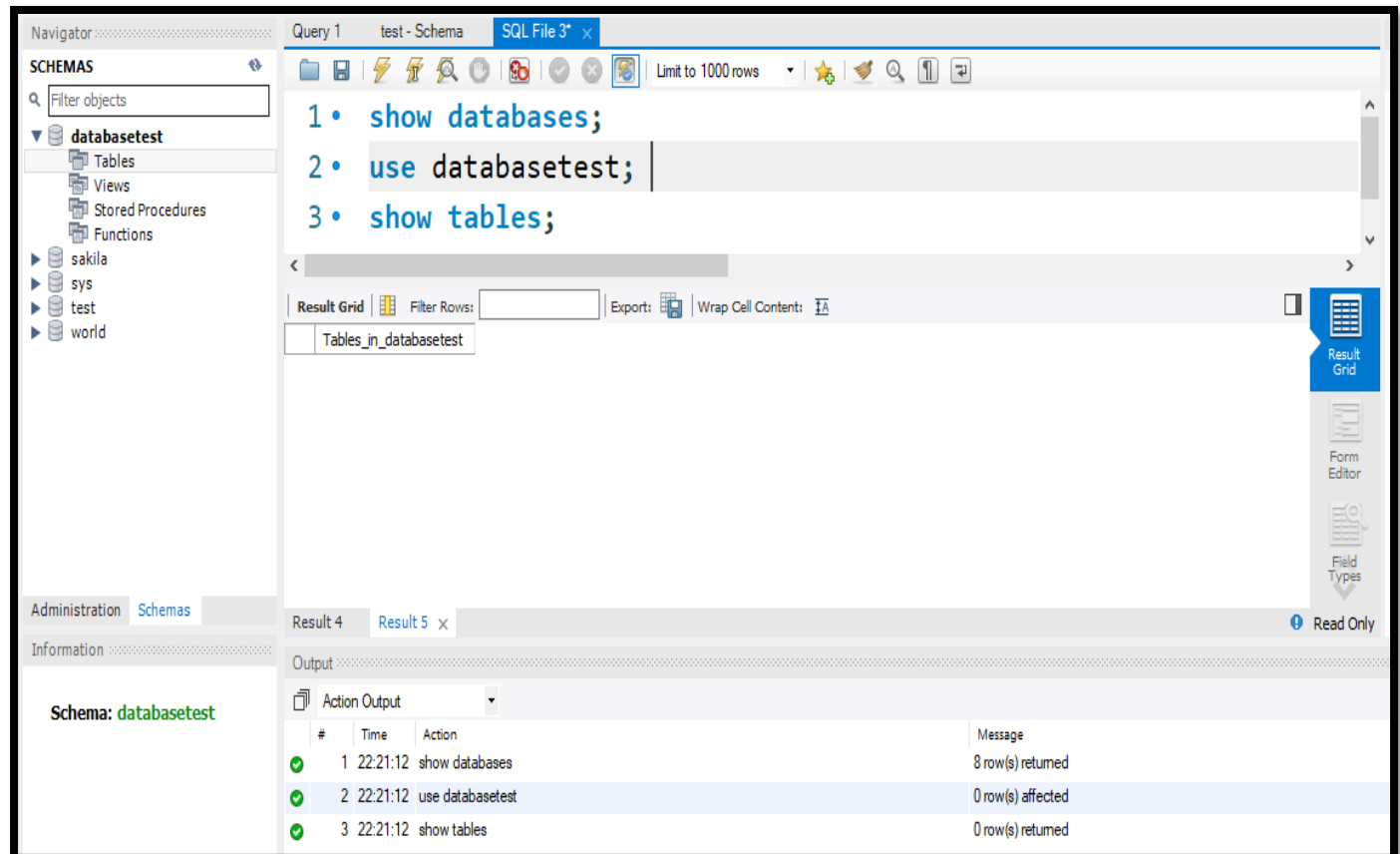
Database
databasetest
information_schema
mysql
performance_schema
sakila
sys
test
world

The 'Output' panel at the bottom shows the execution log:

#	Time	Action	Message
✓ 1	22:18:57	show databases	8 row(s) returned
✓ 2	22:18:57	use databasetest	0 row(s) affected

Show Tables for a specific database – s1

- To show tables in the chosen database just type: **show tables** .



The screenshot displays a SQL IDE interface with the following components:

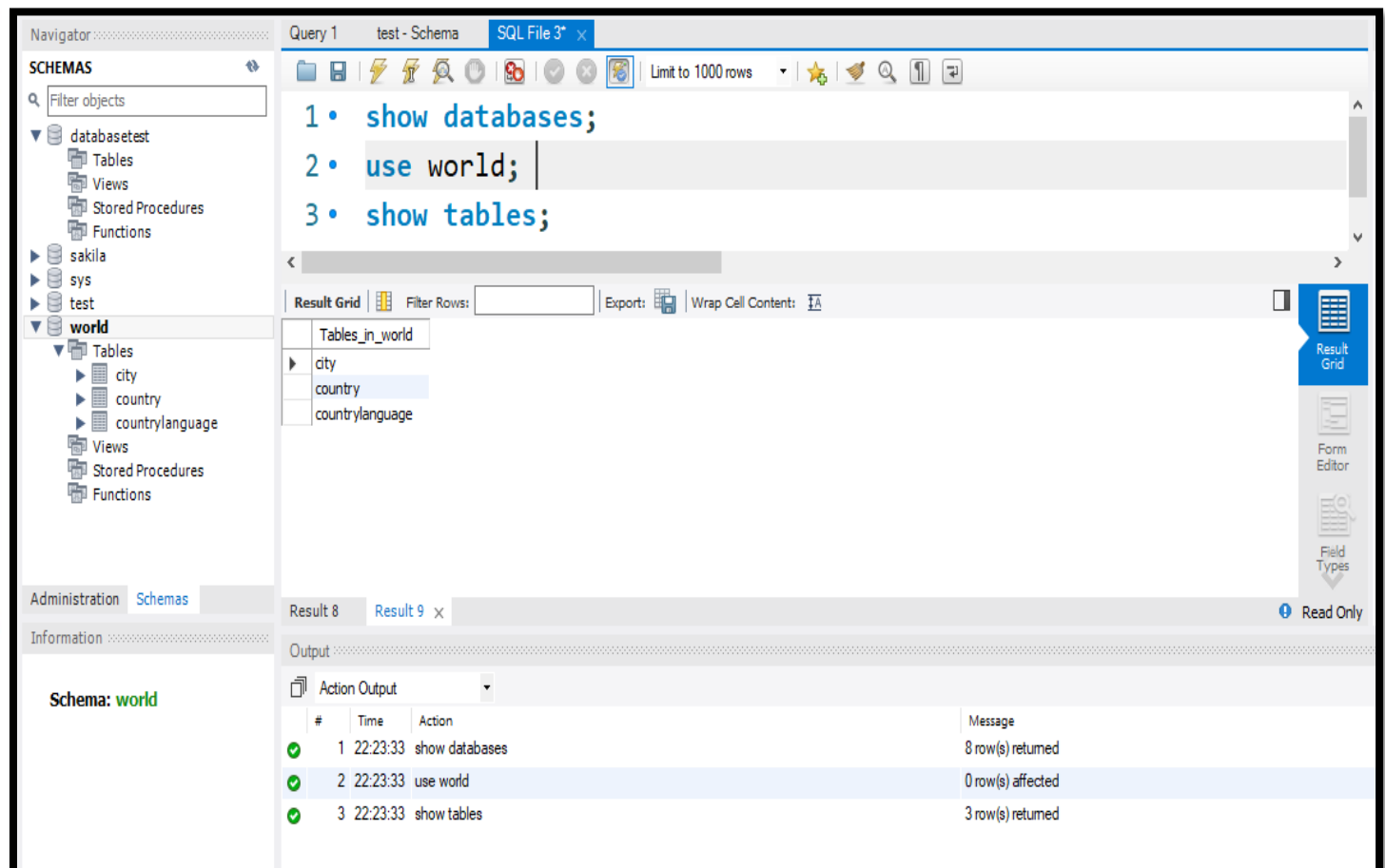
- Navigator:** Shows a tree view of databases. The 'databasetest' database is selected, and its 'Tables' folder is expanded.
- Query Editor:** Contains three SQL commands:

```
1 • show databases;  
2 • use databasetest;  
3 • show tables;
```
- Result Grid:** Displays the output of the queries. The first query returns 8 row(s), the second returns 0 row(s) affected, and the third returns 0 row(s).
- Output Panel:** Shows the execution log with the following entries:

#	Time	Action	Message
1	22:21:12	show databases	8 row(s) returned
2	22:21:12	use databasetest	0 row(s) affected
3	22:21:12	show tables	0 row(s) returned

Show Tables for a specific database – S2

- To show tables in **world** database for example



The screenshot displays the SQL Enterprise Manager interface. On the left, the 'SCHEMAS' pane shows a tree view of databases. The 'world' database is selected, and its 'Tables' folder is expanded, showing 'city', 'country', and 'countrylanguage'. The main query editor shows three SQL statements: 'show databases;', 'use world;', and 'show tables;'. The 'Result Grid' pane shows the output of the 'show tables' query, listing the tables 'city', 'country', and 'countrylanguage'. The 'Output' pane at the bottom shows the execution log for the three queries.

SCHEMAS

- Filter objects
- datasestest
 - Tables
 - Views
 - Stored Procedures
 - Functions
- sakila
- sys
- test
- world**
 - Tables
 - city
 - country
 - countrylanguage
 - Views
 - Stored Procedures
 - Functions

Query 1 test - Schema SQL File 3* x

```
1 • show databases;  
2 • use world;  
3 • show tables;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

Tables_in_world	
city	
country	
countrylanguage	

Result 8 **Result 9** x | Read Only

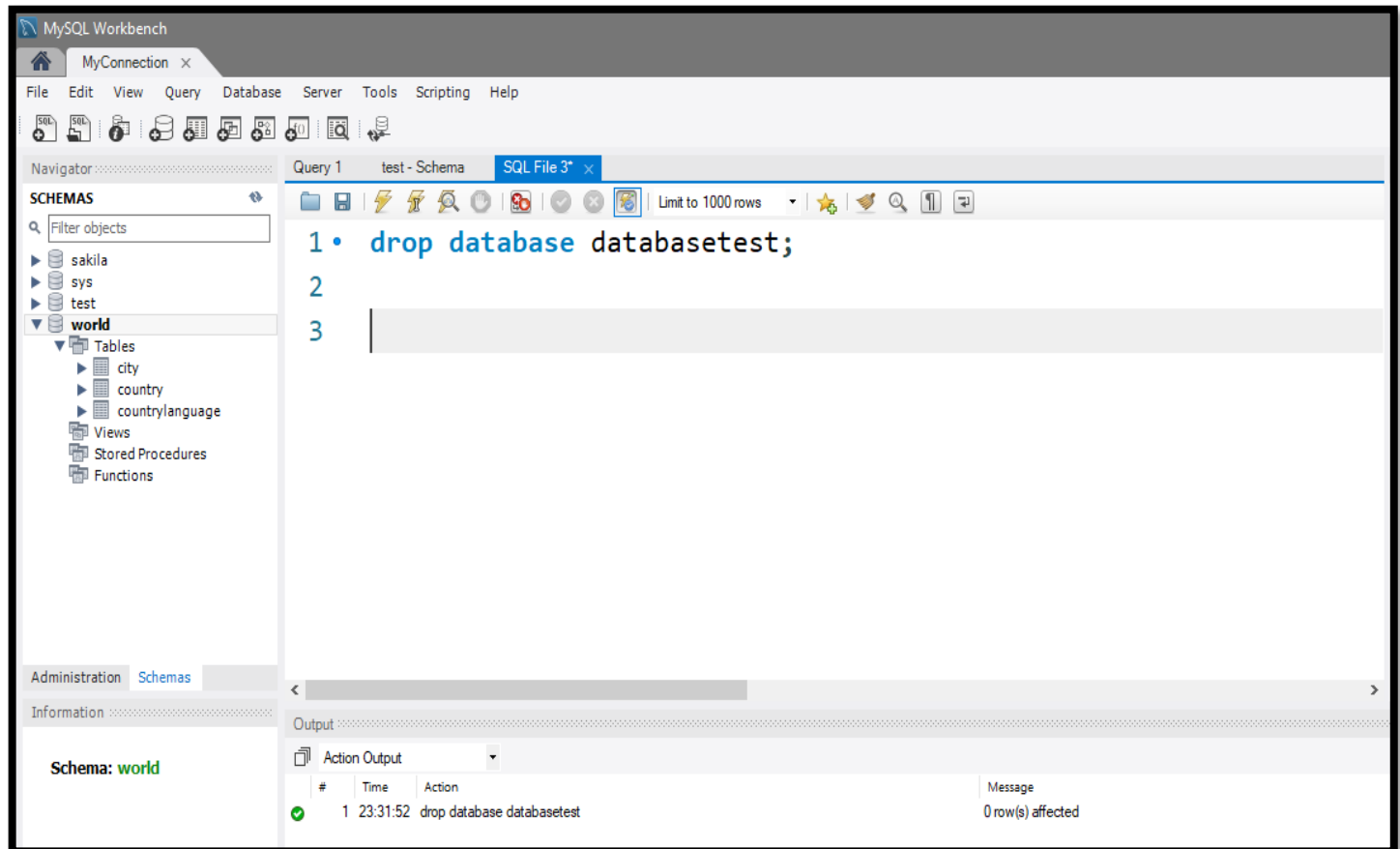
Output

Action Output

#	Time	Action	Message
✓ 1	22:23:33	show databases	8 row(s) returned
✓ 2	22:23:33	use world	0 row(s) affected
✓ 3	22:23:33	show tables	3 row(s) returned

Delete a Database

- To drop a specific database you should type:
drop database [Name of the database]





Exercises

- Start a new connection with a name **“SchoolConnection”**.
- Create a new Database and name it **“School”**
- Show all databases in your new connection
- Use your **“school”** database & show tables
- Show tables in **sakila** schema if you have the samples
- Drop **school** database.