**Birla Institute of Technology and Science, Pilani**

**CS F212 Database Systems**

**Lab No # 0**

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# Introduction

Lab sheets are based on MySQL Server-8.0. Each DBMS does things differently, and no major DBMS follows the specification exactly.

SQL is divided into three major parts.

1. Data description language (DDL) is used to define the structure of the data.
2. Data manipulation language (DML) is used to store and retrieve data from the database.
3. Data control language (DCL) is used to restrict access to data by certain users.

# Installing MySQL Server on Windows-10 64-bit Version

## MySQL Community Downloads

Go to the following link for download.

<https://dev.mysql.com/downloads/mysql/>



Click on download button highlighted in red color.



Login / signup for download the software.

## Installation and Configuration of MySQL Server

Open the downloaded file and follow the instruction as shown in screenshots.

Graphical user interface, application, Word

Description automatically generated

Graphical user interface, text, application, email

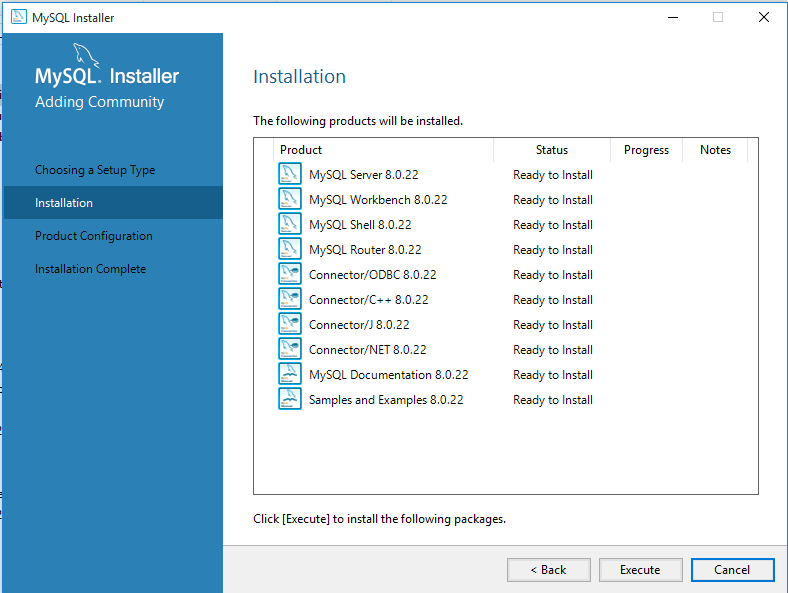
Description automatically generated

This requires some additional software’s those not needed this time. Click on next button.

Graphical user interface, text, application

Description automatically generated

Click on “Yes” button.



Click on “Execute” Button to begin installation of MySQL Products.

Graphical user interface, application

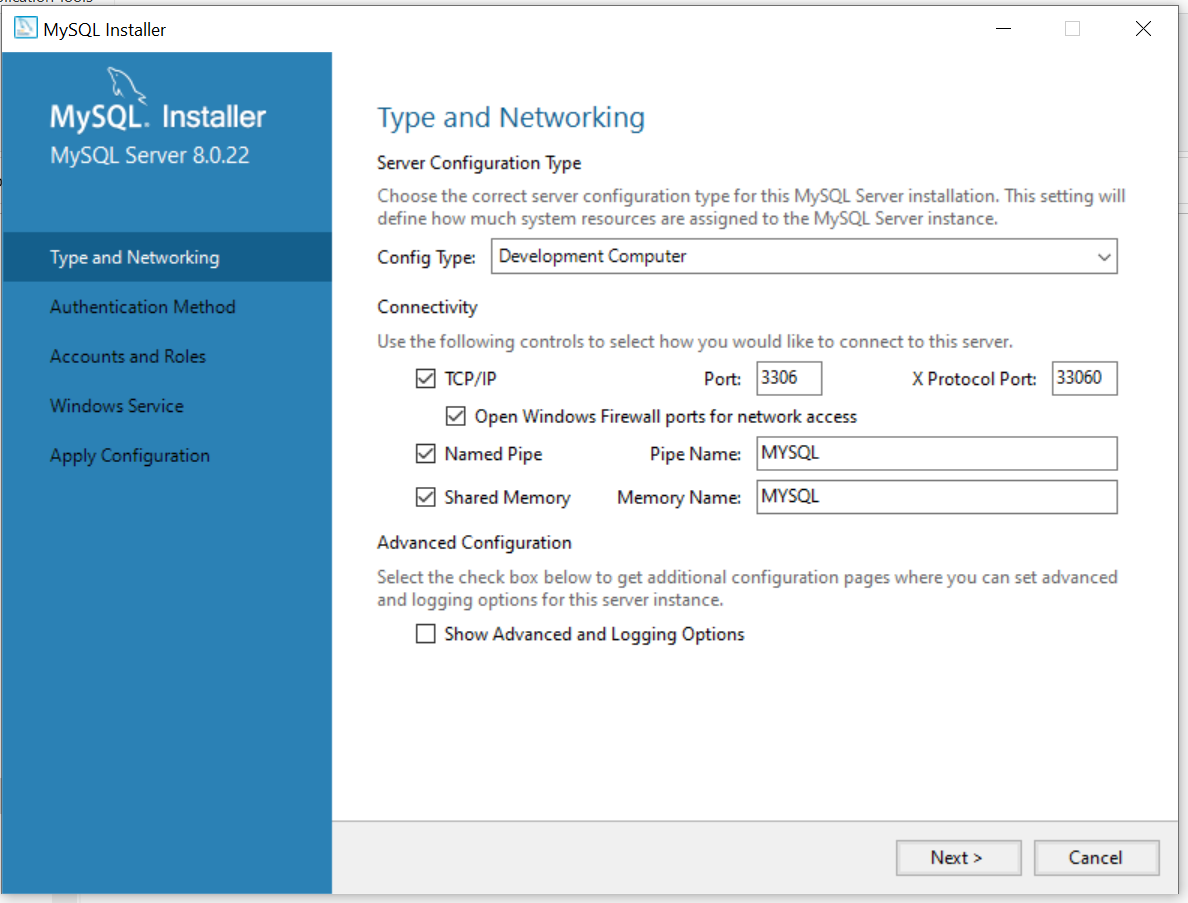
Description automatically generated

Green ticks show that products installed successfully.

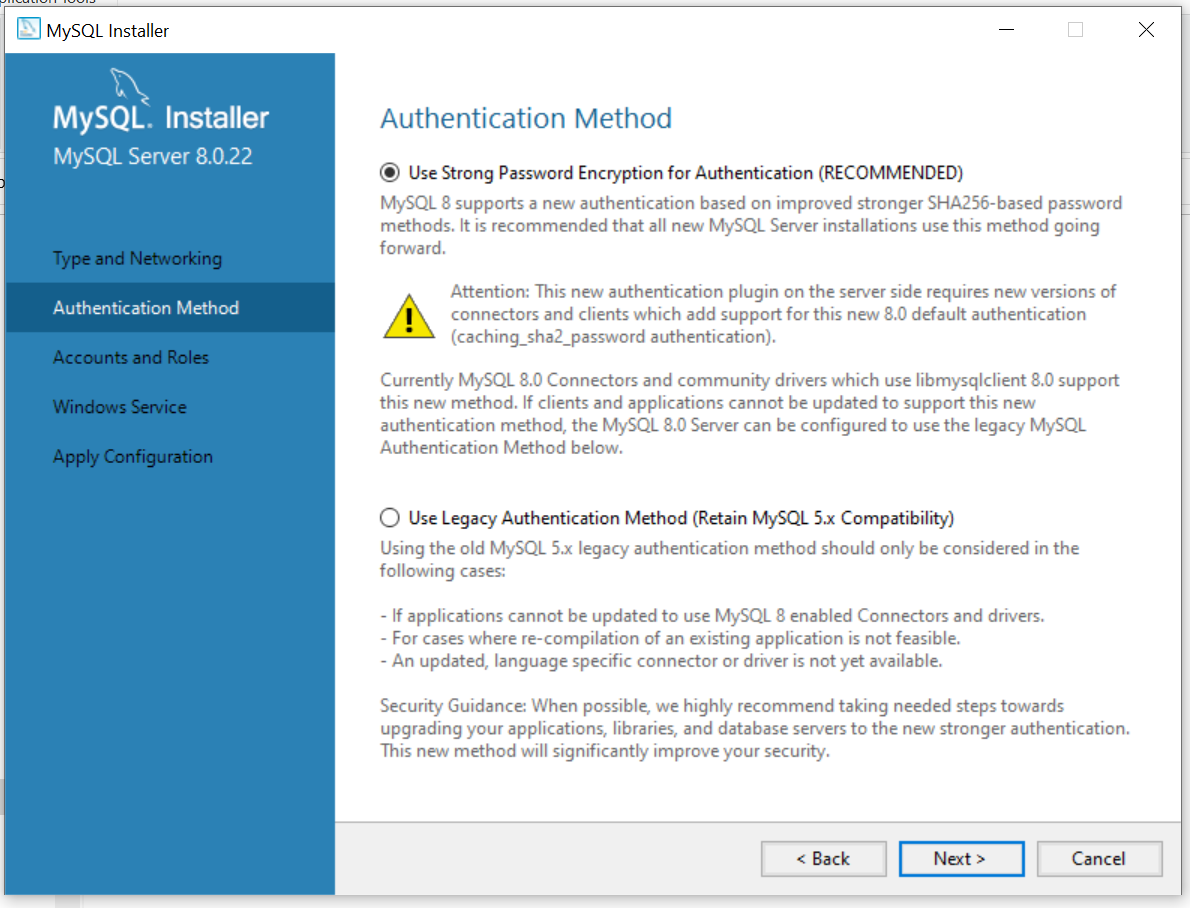
Graphical user interface, text, application

Description automatically generated

Next, we need to configure the MySQL Server and sample database. Click on next button.



Config type should be Development Computer and remember the port number which will be useful when you are connecting from third-party applications. Click on “Next” button.



Click on “Next” Button.

Graphical user interface, application

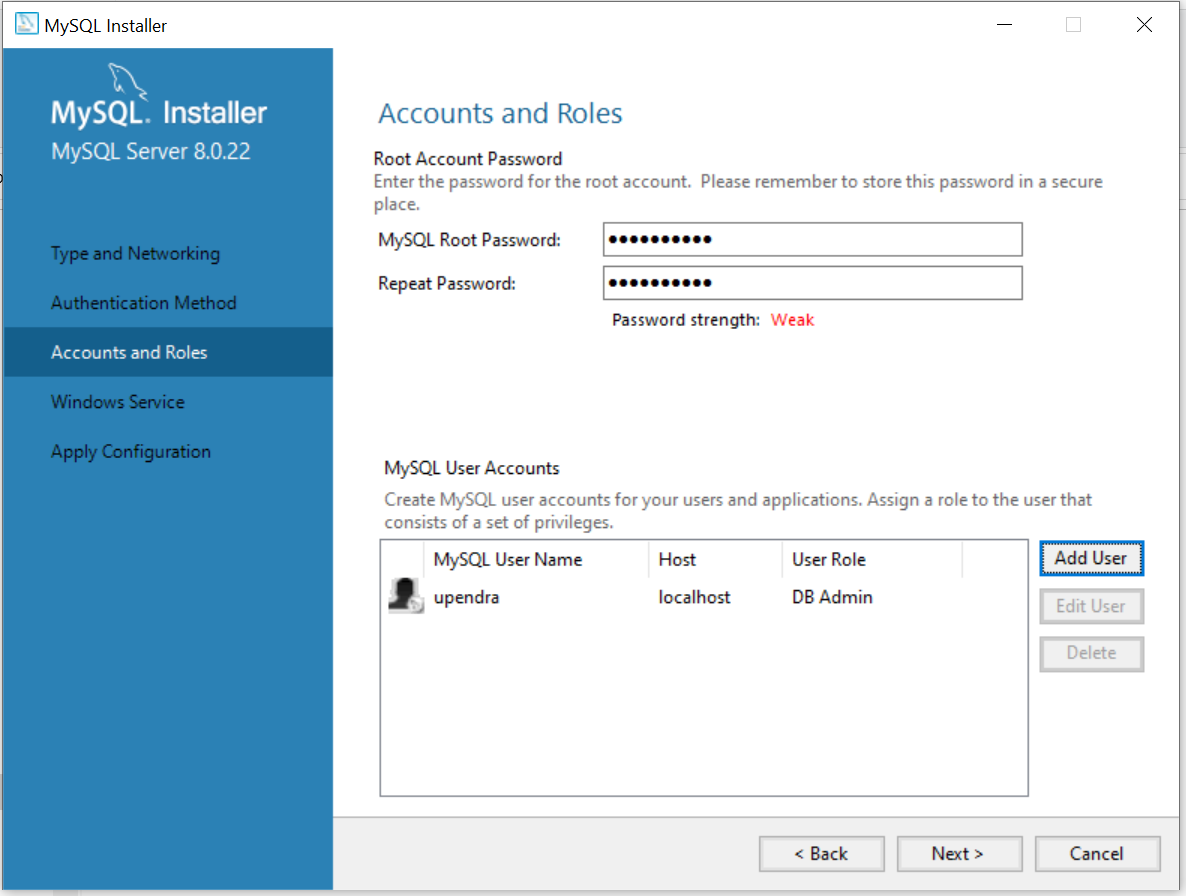
Description automatically generated

Choose a root password for MySQL server and not down it. It will require several times in future. Click on the “Add User” Button to create a user.

Graphical user interface, application, Word

Description automatically generated

Choose username and password as per your choice and fill as shown in above screenshot and click on “Ok” button.



Click on “Next” button.

Graphical user interface, application, Word

Description automatically generated

Click on “Next” button.

Graphical user interface, application

Description automatically generated

Click on “Execute” button.

Graphical user interface, application

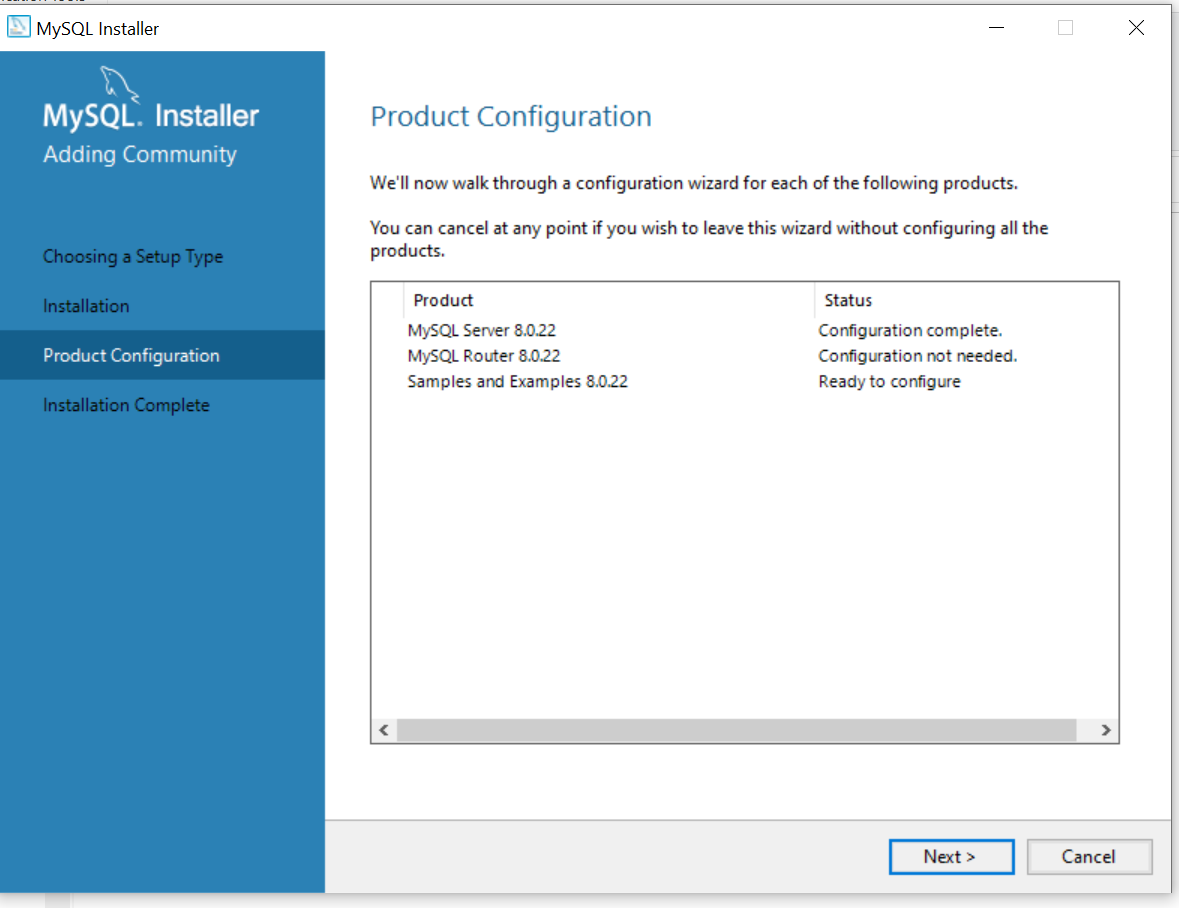
Description automatically generated

Click on “Finish” button to continue.

Graphical user interface, text, application

Description automatically generated

MySQL Server configuration completed. Now, click on “Next” button.



MySQL Router configuration is not needed this time. Click on “Next” button.

Graphical user interface, text, application

Description automatically generated

Type root password to create sample database and click on “Check” button. There will a green right tick appears. Click on “Next” button.

Graphical user interface, application

Description automatically generated

Click on “Execute” button.

Graphical user interface, application

Description automatically generated

Click on “Finish” button.

Graphical user interface, text, application

Description automatically generated

Click on “Next” button.

Graphical user interface, text, application

Description automatically generated

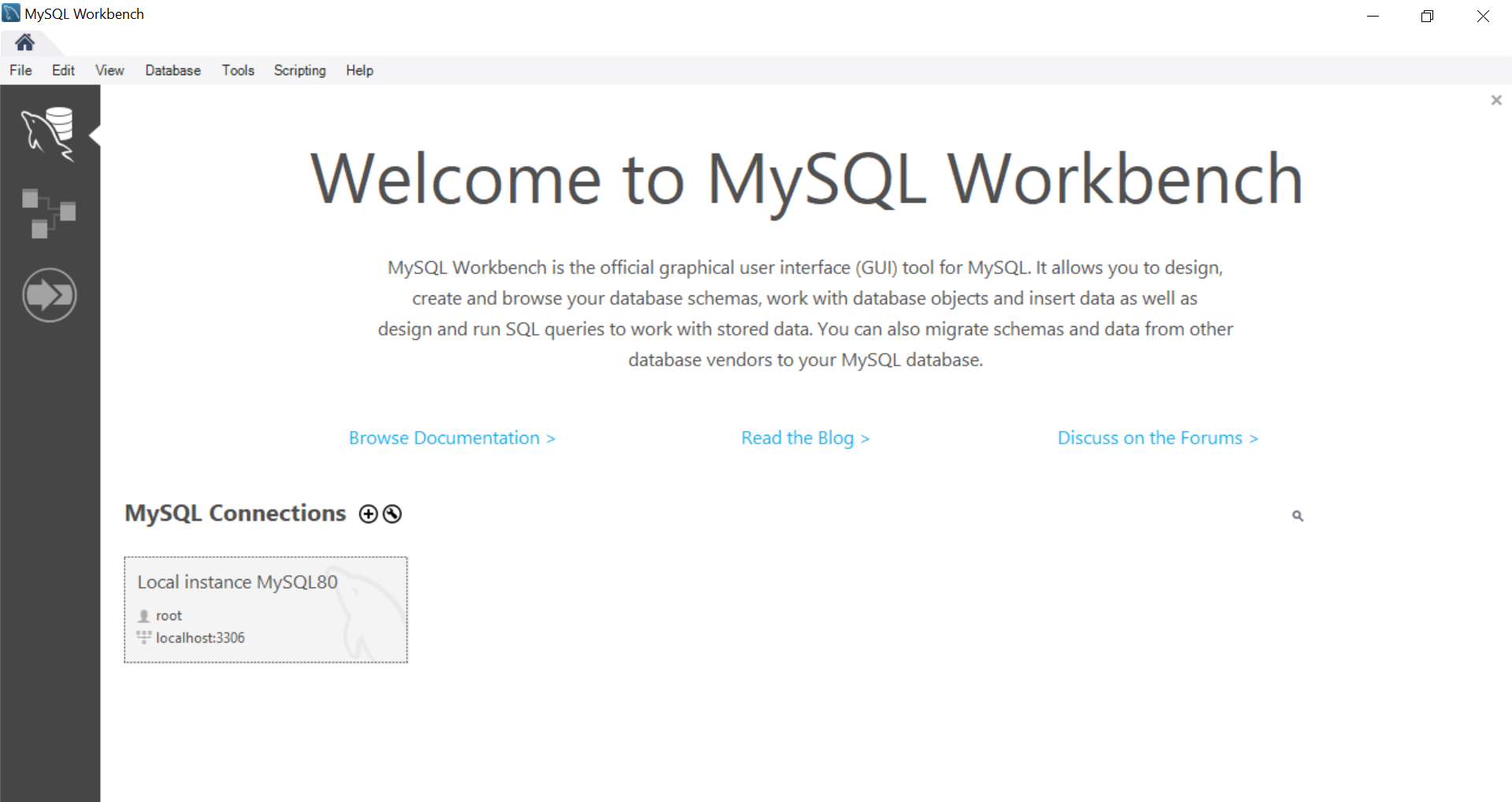
Click on “Finish” button.

# Running SQL queries in MySQl Workbench

## Open MySQL Workbench

Start Menu 🡪 MySQL Workbench 8.0 CE.

## Connecting to MySQL Server



Click on area shown inside red color rectangle. A dialog box is opened asking for root password. Provide rood-password.

Graphical user interface, application

Description automatically generated

Check server status. If it shows “Running”, it means everything is installed and configured successfully.

## Selecting Default Schema

Graphical user interface, application

Description automatically generated

Click on “Schemas” in Navigator’s bottom pane. You will find three schemas created during installation. “Right Click” on schema name and select “Set as Default Schema”.

## Writing and Executing SQL query

A picture containing table

Description automatically generated

File 🡪 New Query Tab or (Ctrl+T). Write “Select \* from city” in workspace provided. Click on icon highlighted in red box to execute query. In this example “sakila” is selected as default schema.

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