



# SECD2523 DATABASE

SQL INSTALLATION  
Week 3

# Step 1

## Download MySQL Installer

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# Step 1

## Download MySQL Installer

### ① MySQL Community Downloads

- MySQL Yum Repository
- MySQL APT Repository
- MySQL SUSE Repository
  
- MySQL Community Server
- MySQL NDB Cluster
- MySQL Router
- MySQL Shell
- MySQL Operator
- MySQL NDB Operator
- MySQL Workbench
  
- MySQL Installer for Windows

For Mac users, click on this  
MySQL Community Server



For Windows users, click on this  
MySQL Installer for Windows

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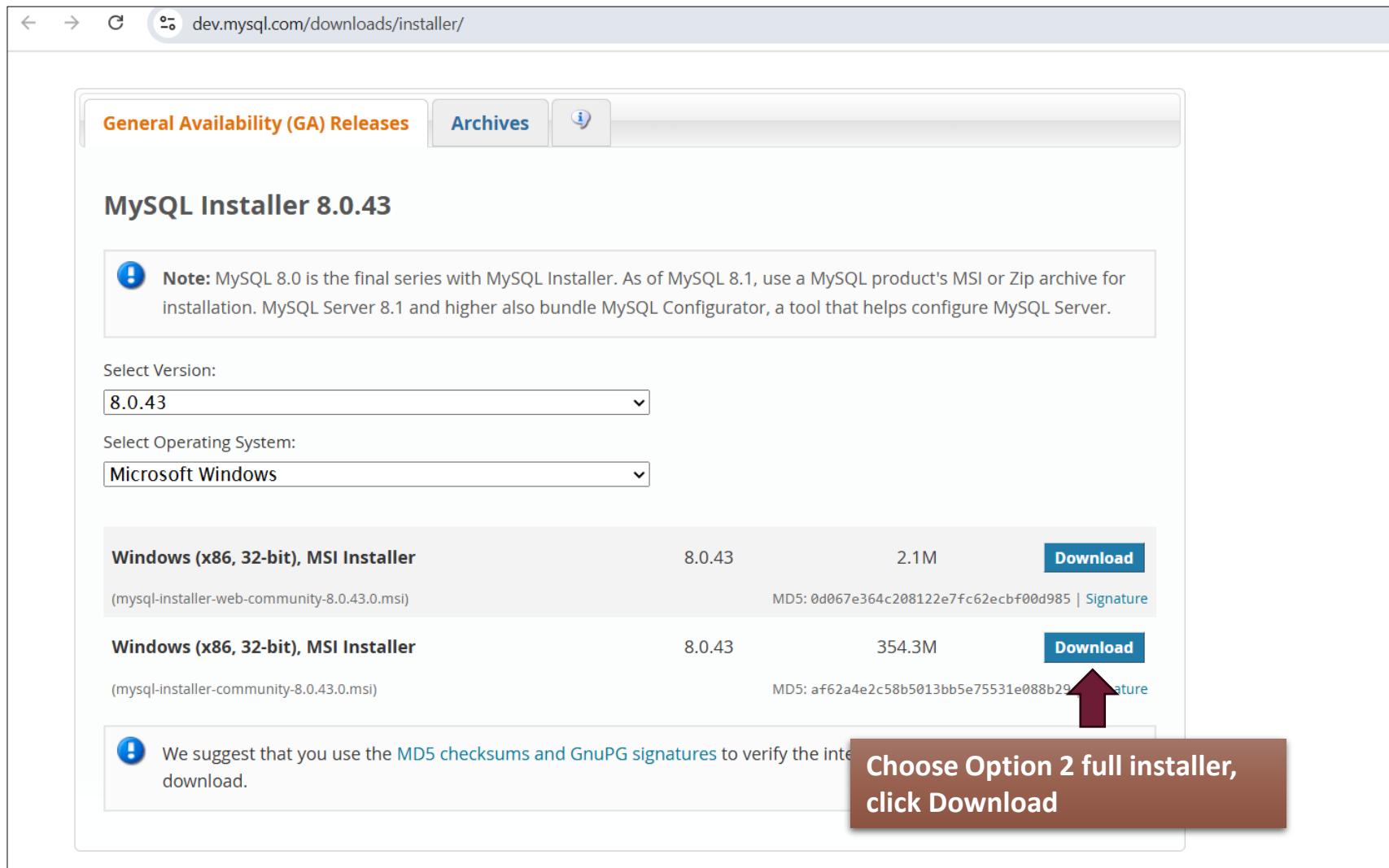
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# Installing MySQL on Windows



# Step 1

## Download MySQL Installer (Windows)



The screenshot shows the MySQL Installer download page for Windows. At the top, there are tabs for "General Availability (GA) Releases" (which is selected), "Archives", and a help icon. Below the tabs, it says "MySQL Installer 8.0.43". A note states: "Note: MySQL 8.0 is the final series with MySQL Installer. As of MySQL 8.1, use a MySQL product's MSI or Zip archive for installation. MySQL Server 8.1 and higher also bundle MySQL Configurator, a tool that helps configure MySQL Server." Under "Select Version:", a dropdown menu shows "8.0.43". Under "Select Operating System:", a dropdown menu shows "Microsoft Windows". Below these, two download options are listed:

Installer Type	Version	File Size	Action
Windows (x86, 32-bit), MSI Installer (mysql-installer-web-community-8.0.43.0.msi)	8.0.43	2.1M	<a href="#">Download</a>
Windows (x86, 32-bit), MSI Installer (mysql-installer-community-8.0.43.0.msi)	8.0.43	354.3M	<a href="#">Download</a>

A blue arrow points to the "Download" button for the 354.3M installer. A callout box at the bottom left says: "We suggest that you use the MD5 checksums and GnuPG signatures to verify the integrity of your download." A brown callout box at the bottom right says: "Choose Option 2 full installer, click Download".

# Step 1

## Download MySQL Installer (Windows)

← → ⌂ dev.mysql.com/downloads/file/?id=544662

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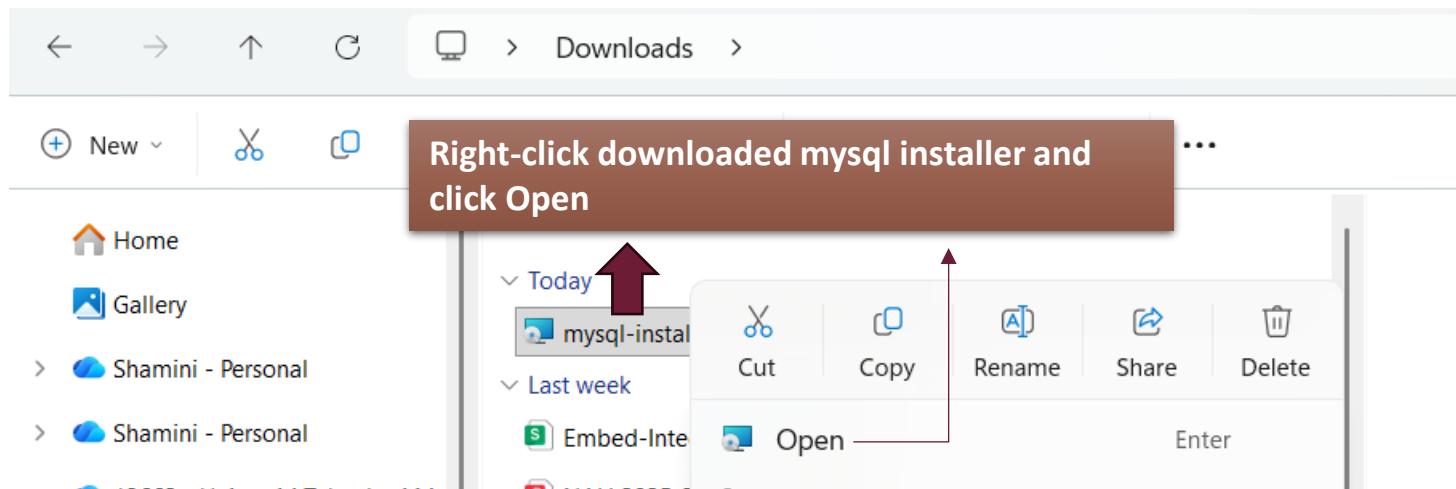
MySQL.com is using Oracle SSO for authentication. If you already have an Oracle Web account, click the Login link. Otherwise, you can signup for a free account by clicking the Sign Up link and following the instructions.

No thanks, just start my download.

← Click Download

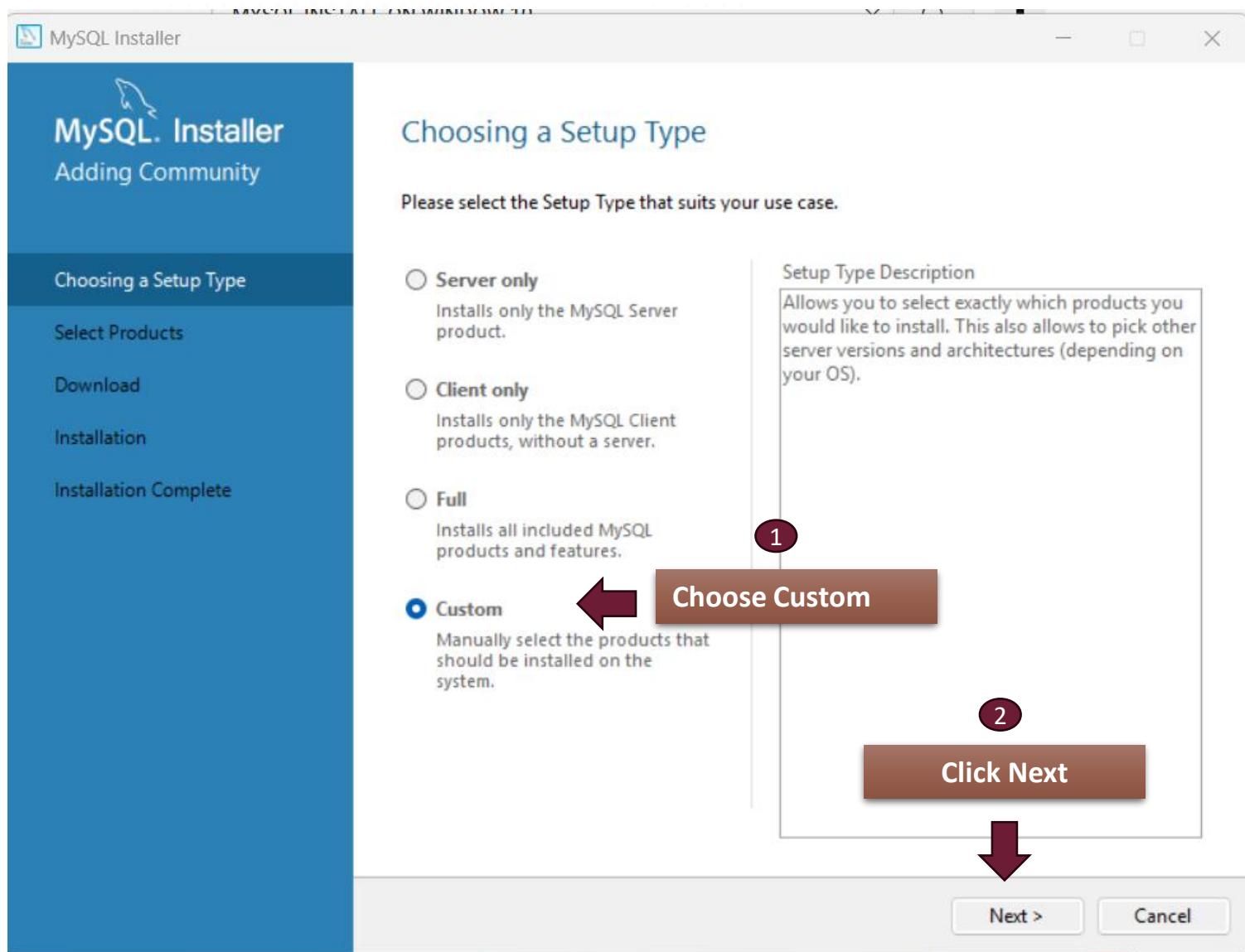
# Step 1

## Download MySQL Installer (Windows)



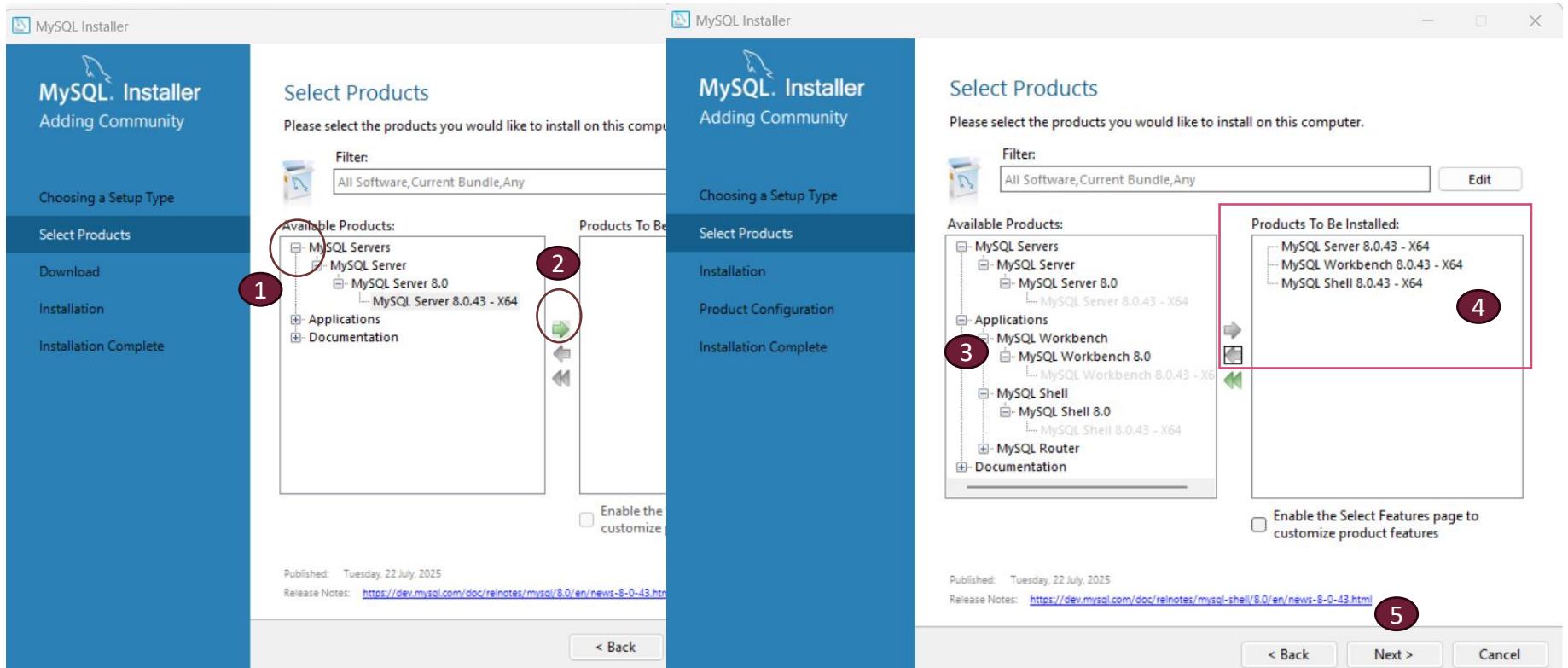
## Step 2

# Run the Installer (Windows)



# Step 2

## Run the Installer (Windows)

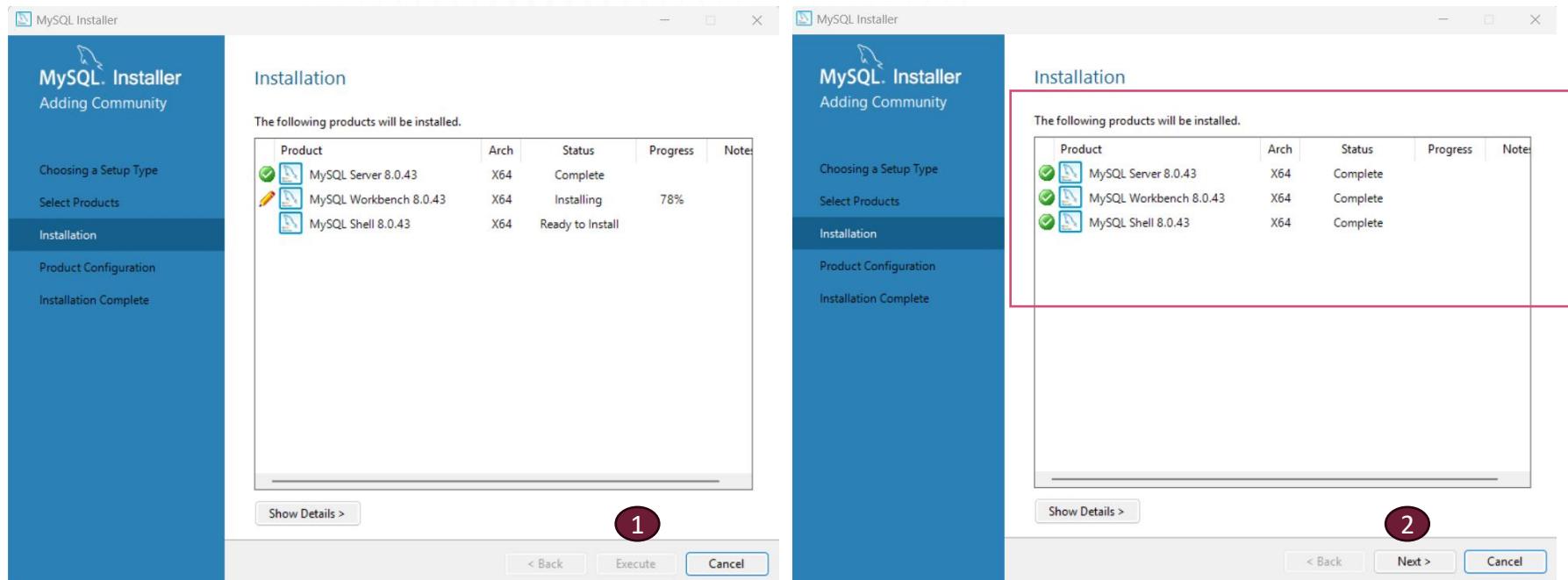


Choose the available products to be installed and click the Green Arrow

Make sure to add:  
**MySQL Server**  
**MySQL Workbench**  
**MySQL Shell**  
 Then Click Next

# Step 2

## Run the Installer (Windows)

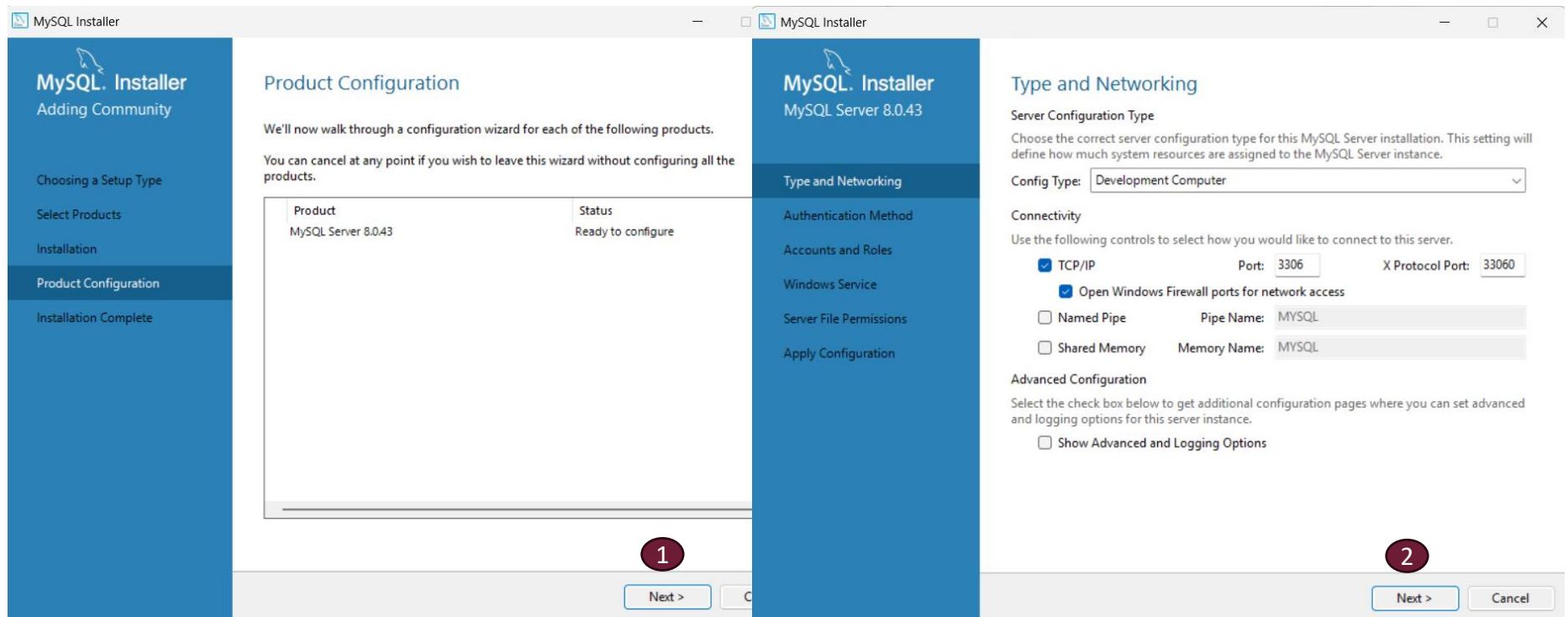


Make sure click Execute

The installed products shall show the status **COMPLETE** and Proceed Next

# Step 3

## Configure MySQL Server (Windows)



The image shows two windows of the MySQL Installer:

- Left Window (Product Configuration):**
  - Header: MySQL Installer Adding Community
  - Left sidebar: Choosing a Setup Type, Select Products, Installation, Product Configuration (highlighted), Installation Complete.
  - Main content: Product: MySQL Server 8.0.43, Status: Ready to configure.
  - Footer: Next > C
- Right Window (Type and Networking):**
  - Header: MySQL Installer MySQL Server 8.0.43
  - Left sidebar: Type and Networking (highlighted), Authentication Method, Accounts and Roles, Windows Service, Server File Permissions, Apply Configuration.
  - Main content:
    - Type and Networking:** Config Type: Development Computer.
    - Connectivity:** TCP/IP (checked), Port: 3306, X Protocol Port: 33060, Open Windows Firewall ports for network access (checked).
    - Advanced Configuration:** Named Pipe (unchecked), Pipe Name: MYSQL, Shared Memory (unchecked), Memory Name: MYSQL, Show Advanced and Logging Options (unchecked).
  - Footer: Next > Cancel

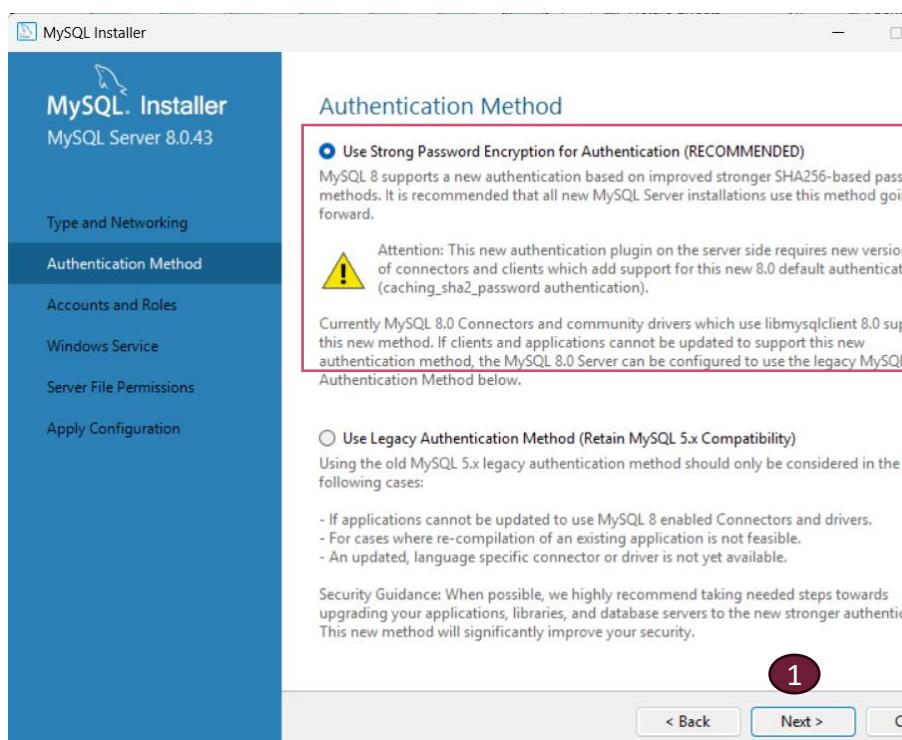
Two red circles with numbers indicate specific steps:

- 1: Points to the "Next >" button in the Product Configuration window.
- 2: Points to the "Next >" button in the Type and Networking window.

Maintain the Server Configuration as it is

# Step 3

## Configure MySQL Server (Windows)

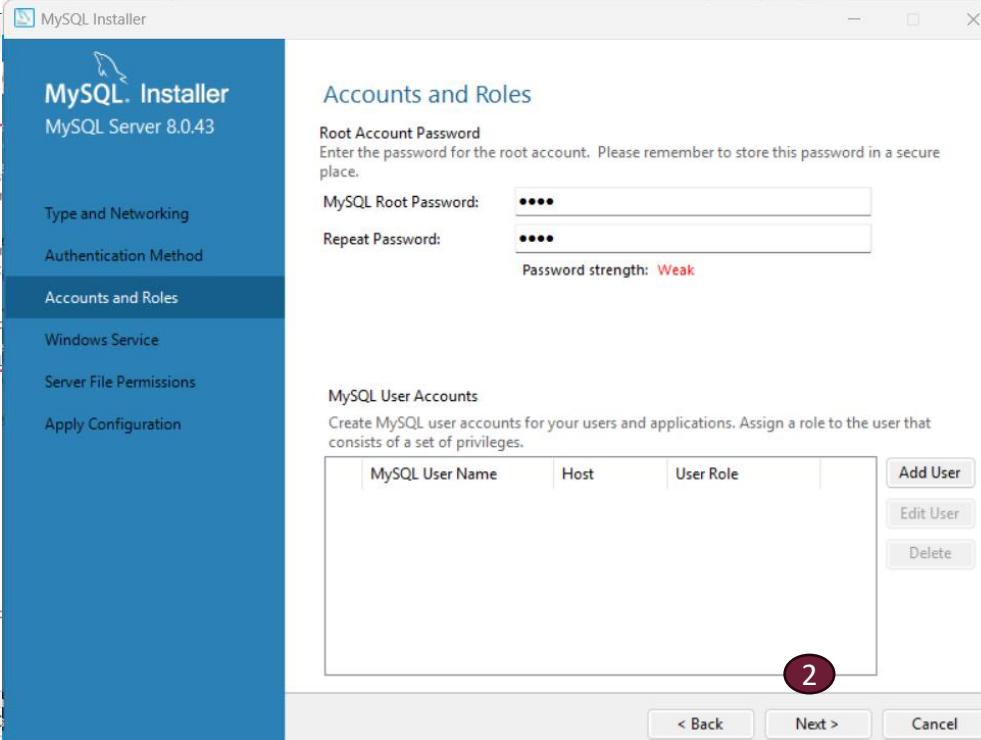


The screenshot shows the MySQL Installer for MySQL Server 8.0.43. The left sidebar has tabs for Type and Networking, Authentication Method (which is selected), Accounts and Roles, Windows Service, Server File Permissions, and Apply Configuration. The main panel is titled 'Authentication Method' and contains two options:

- Use Strong Password Encryption for Authentication (RECOMMENDED) - MySQL 8 supports a new authentication based on improved stronger SHA256-based password methods. It is recommended that all new MySQL Server installations use this method going forward.
- Use Legacy Authentication Method (Retain MySQL 5.x Compatibility) - Using the old MySQL 5.x legacy authentication method should only be considered in the following cases:
  - If applications cannot be updated to use MySQL 8 enabled Connectors and drivers.
  - For cases where re-compilation of an existing application is not feasible.
  - An updated, language specific connector or driver is not yet available.

Below these options is a note: "Security Guidance: When possible, we highly recommend taking needed steps towards upgrading your applications, libraries, and database servers to the new stronger authentication method. This new method will significantly improve your security."

At the bottom of the panel are buttons: < Back, Next >, and Cancel. A red circle labeled '1' is over the 'Next >' button.

The screenshot shows the MySQL Installer on the 'Accounts and Roles' step. The left sidebar tabs are the same as the previous screen. The main panel title is 'Accounts and Roles'. It includes fields for 'MySQL Root Password' and 'Repeat Password', both currently set to '\*\*\*\*'. Below these is a note: "Password strength: Weak".

On the right side, there is a section titled 'MySQL User Accounts' with the sub-instruction: "Create MySQL user accounts for your users and applications. Assign a role to the user that consists of a set of privileges." A table is shown with columns: MySQL User Name, Host, and User Role. There are three buttons on the right: 'Add User', 'Edit User', and 'Delete'. A red circle labeled '2' is over the 'Add User' button.

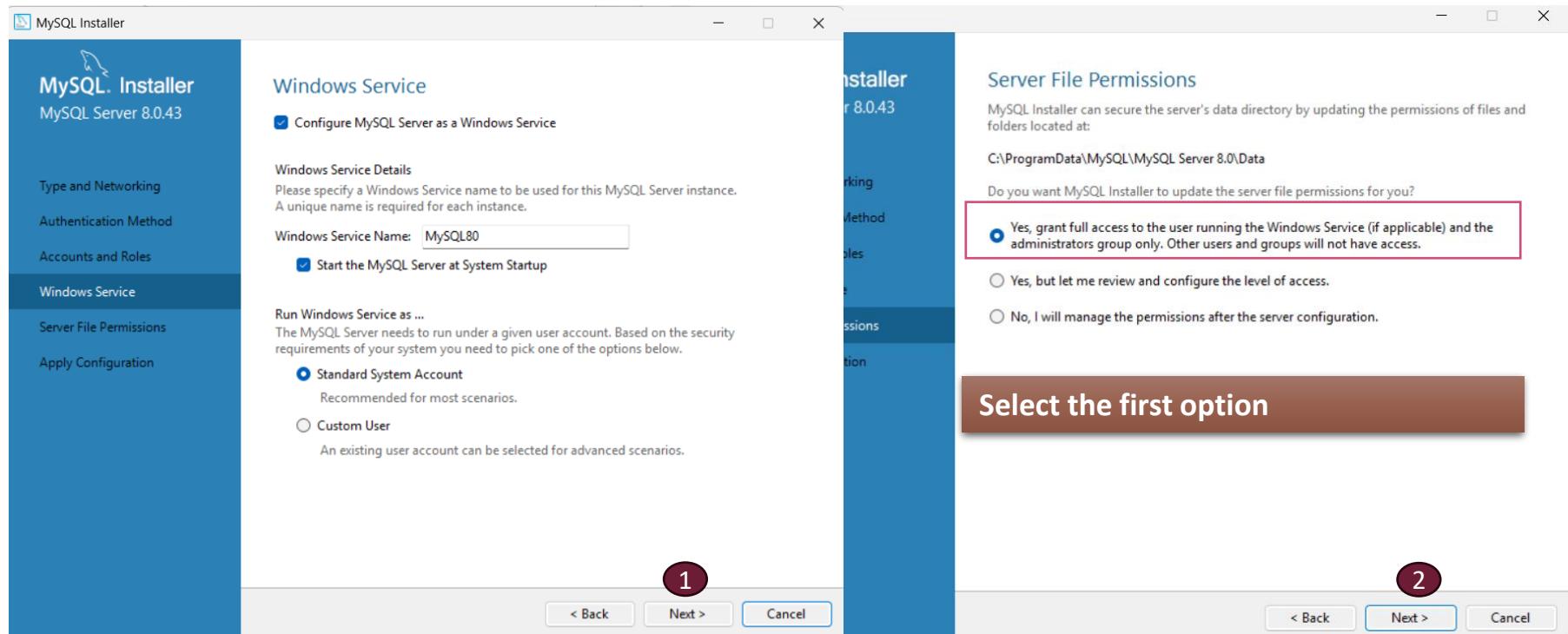
Click Next

Make sure you know your  
MySQL root password.  
Example : admin123

**IMPORTANT**

# Step 3

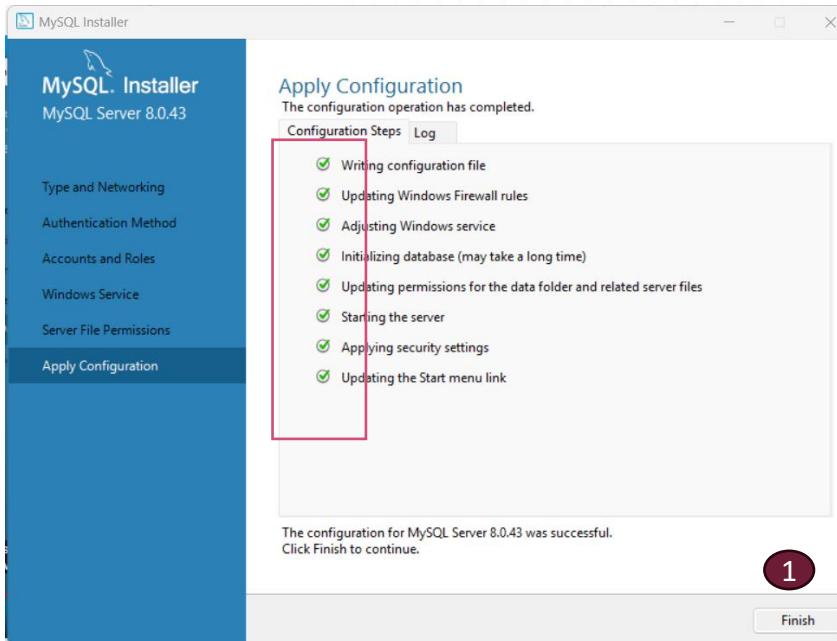
## Configure MySQL Server (Windows/Mac)



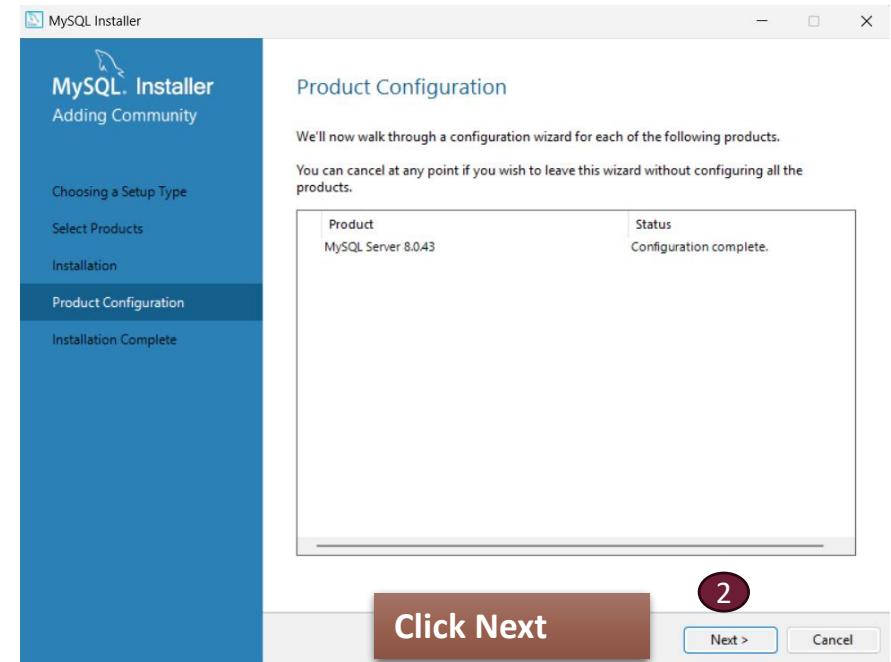
Make sure Windows Service as it is

# Step 3

## Configure MySQL Server (Windows)



**Click Execute and apply the configuration, make sure all configuration steps are complete.**



# Step 4

## Complete Installation (Windows)

MySQL Installer

### MySQL. Installer

Adding Community

- Choosing a Setup Type
- Select Products
- Installation
- Product Configuration
- Installation Complete

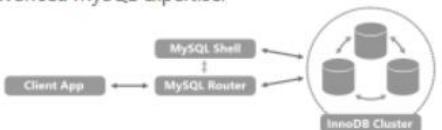
Installation Complete

The installation procedure has been completed.

[Copy Log to Clipboard](#)

Start MySQL Workbench after setup  
 Start MySQL Shell after setup

The MySQL Shell is an advanced MySQL client application that can be used to work with single MySQL Server instances. Further, it can be used to create and manage InnoDB Cluster, an integrated solution for high availability and scalability of MySQL databases, without requiring advanced MySQL expertise.



Refer to the following links for documentation, tutorials and examples on MySQL Shell:

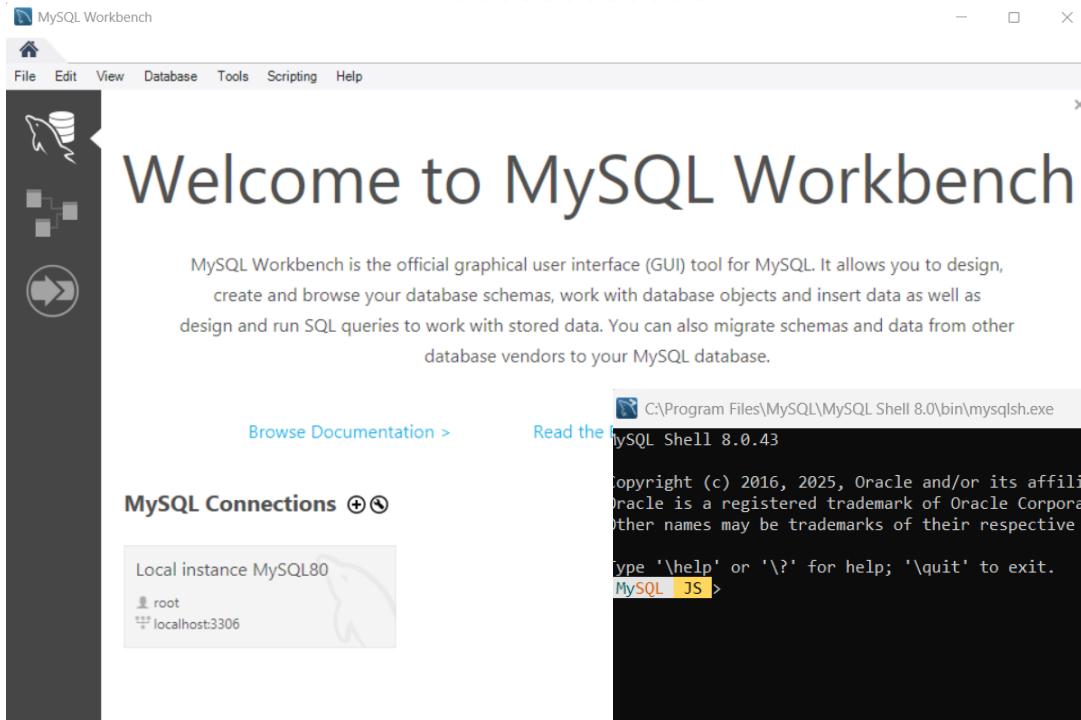
[MySQL Shell Documentation](#)    [Setting up a Real World Cluster Blog](#)  
[The All New MySQL InnoDB ReplicaSet Blog](#)    [Changing Cluster Options Live Blog](#)

1

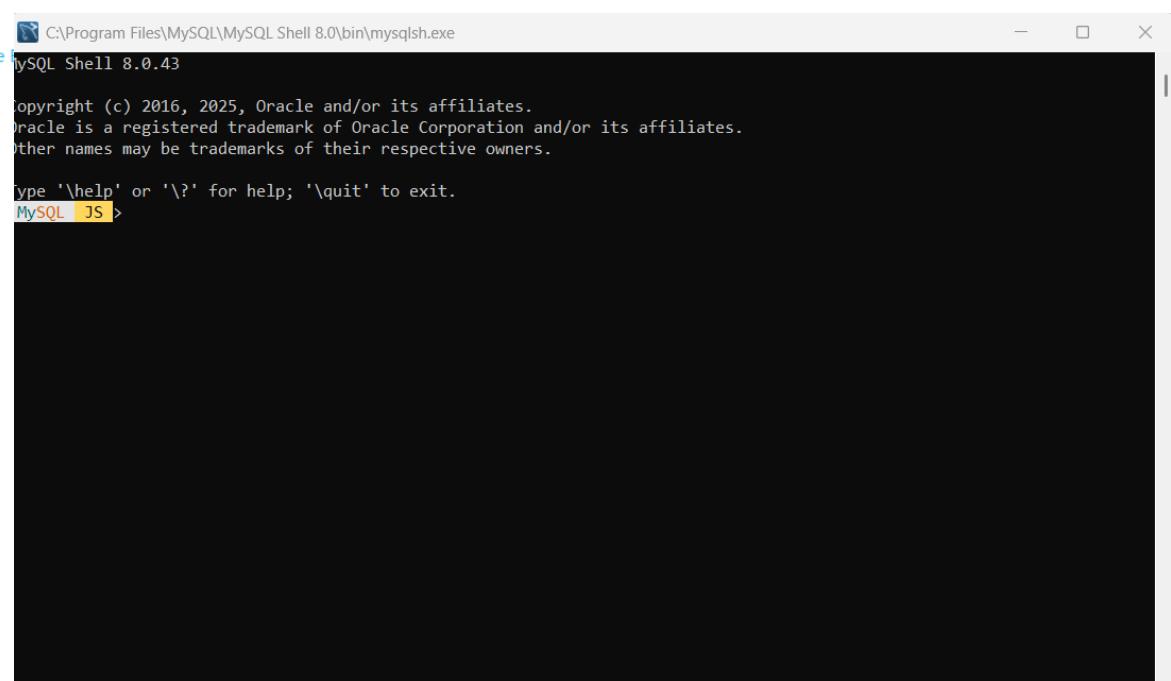
Finish

# Step 4

## Complete Installation (Windows)



You shall now able to access MySQL Workbench and MySQL Shell



The screenshot shows the MySQL Shell command-line interface. The title bar indicates the path: "C:\Program Files\MySQL\MySQL Shell 8.0\bin\mysqlsh.exe". The main text area displays the MySQL Shell version "MySQL Shell 8.0.43" and the copyright notice from Oracle. It also shows the prompt "MySQL [JS] >" followed by a blank command line.

# Installing MySQL on Mac



# Step 1

## Download MySQL Installer (Mac)

MySQL :: Download MySQL Community Server 9.4.0 Innovation

Select Version: 9.4.0 Innovation

Select Operating System: macOS

	Version	File Size	Action
macOS	9.4.0	605.3M	<a href="#">Download</a>
Source Code	9.4.0	609.9M	<a href="#">Download</a>
macOS 15 (ARM, 64-bit), Compressed TAR Archive	9.4.0	161.8M	<a href="#">Download</a>
macOS 15 (x86, 64-bit), Compressed TAR Archive	9.4.0	166.1M	<a href="#">Download</a>
macOS 15 (ARM, 64-bit), Compressed TAR Archive	9.4.0	442.6M	<a href="#">Download</a>

Choose the right option, click Download. Suggested.

You may refer to the following guideline for installation:  
<https://zarkomaslaric.notion.site/Zarko-s-Video-Tutorial-MySQL-Installation-on-Mac-14cf1ebfde2804c933fecff0e02ca51>  
 And <https://www.youtube.com/watch?v=wpGnJHb2R58&t=336s>

MySQL :: Download MySQL Community Server 9.4.0 Innovation

Select Version: 9.4.0 Innovation

Select Operating System: macOS

Select OS Version: All

1 Select the right OS suitable to your machine

2 Packages for Sequoia (15) are compatible with Sonoma (14)

	Version	File Size	Action
macOS 15 (ARM, 64-bit), DMG Archive	9.4.0	605.3M	<a href="#">Download</a>
macOS 15 (x86, 64-bit), DMG Archive	9.4.0	609.9M	<a href="#">Download</a>
macOS 15 (ARM, 64-bit), Compressed TAR Archive	9.4.0	161.8M	<a href="#">Download</a>
macOS 15 (x86, 64-bit), Compressed TAR Archive	9.4.0	166.1M	<a href="#">Download</a>
macOS 15 (ARM, 64-bit), Compressed TAR Archive Test Suite	9.4.0	442.6M	<a href="#">Download</a>

# Step 1

## Download MySQL Installer (Mac)

← → ⌂ dev.mysql.com/downloads/file/?id=544662

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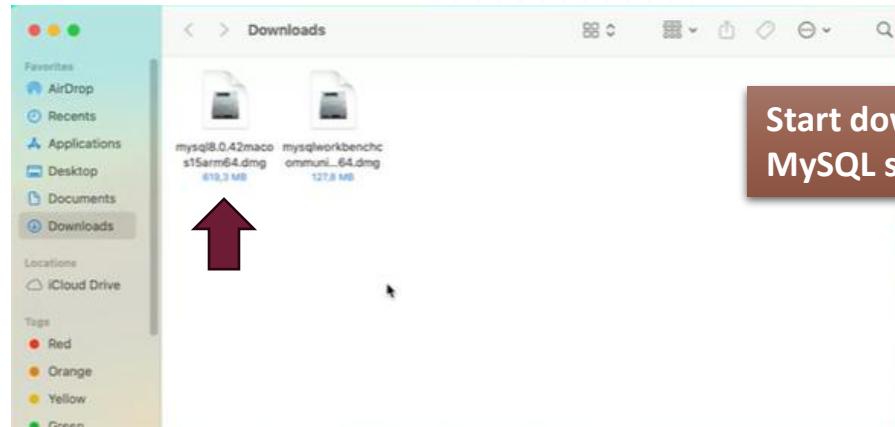
MySQL.com is using Oracle SSO for authentication. If you already have an Oracle Web account, click the Login link. Otherwise, you can signup for a free account by clicking the Sign Up link and following the instructions.

No thanks, just start my download.

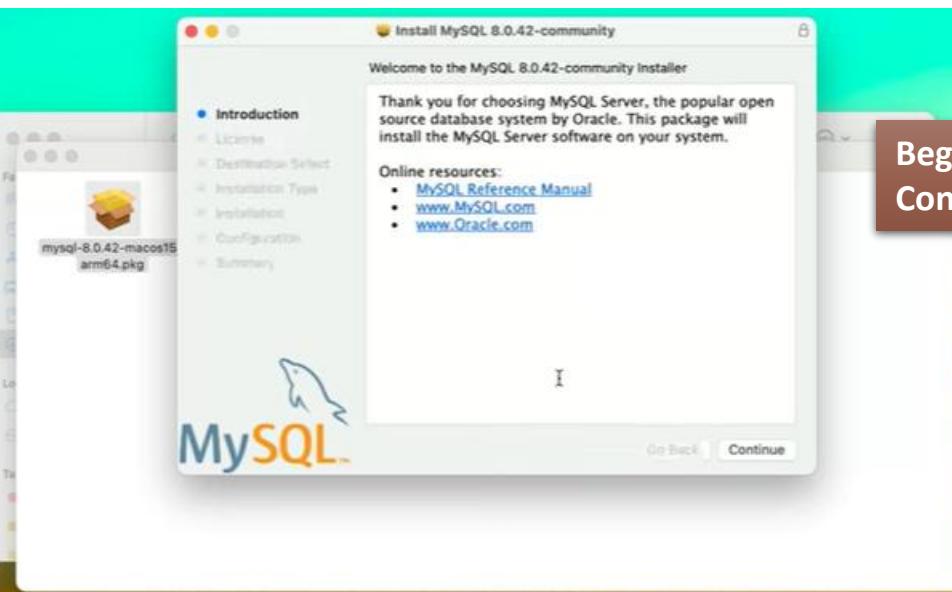
← Click Download

# Step 1

## Download MySQL Installer (Mac)



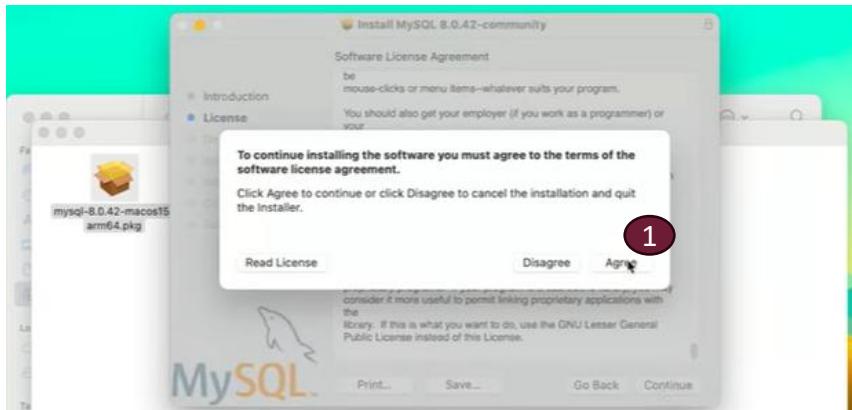
Start downloading MySQL installation (Begin with MySQL server DMG file).



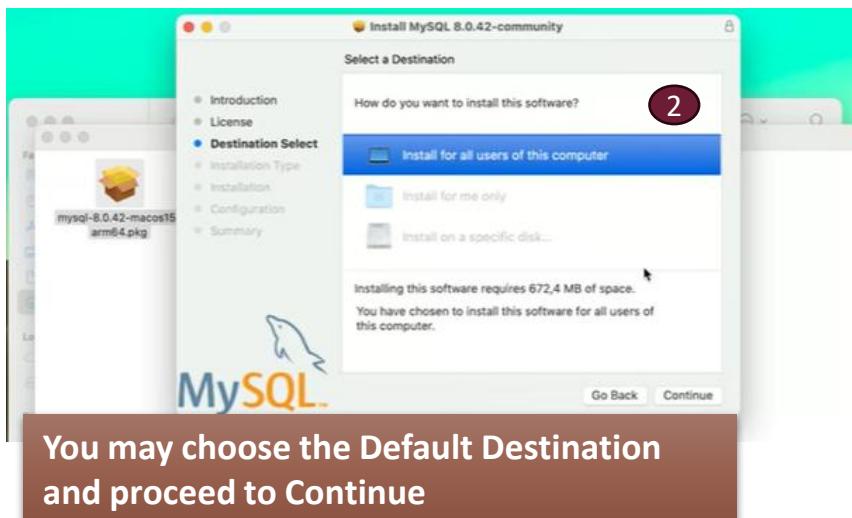
Begin with installation of MySQL, click Continue.

# Step 1

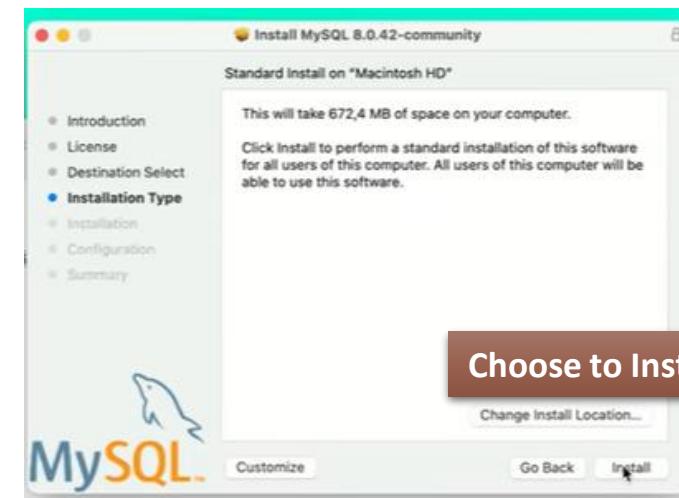
## Download MySQL Installer (Mac)



Proceed to Agree the software license agreement.



You may choose the Default Destination and proceed to Continue

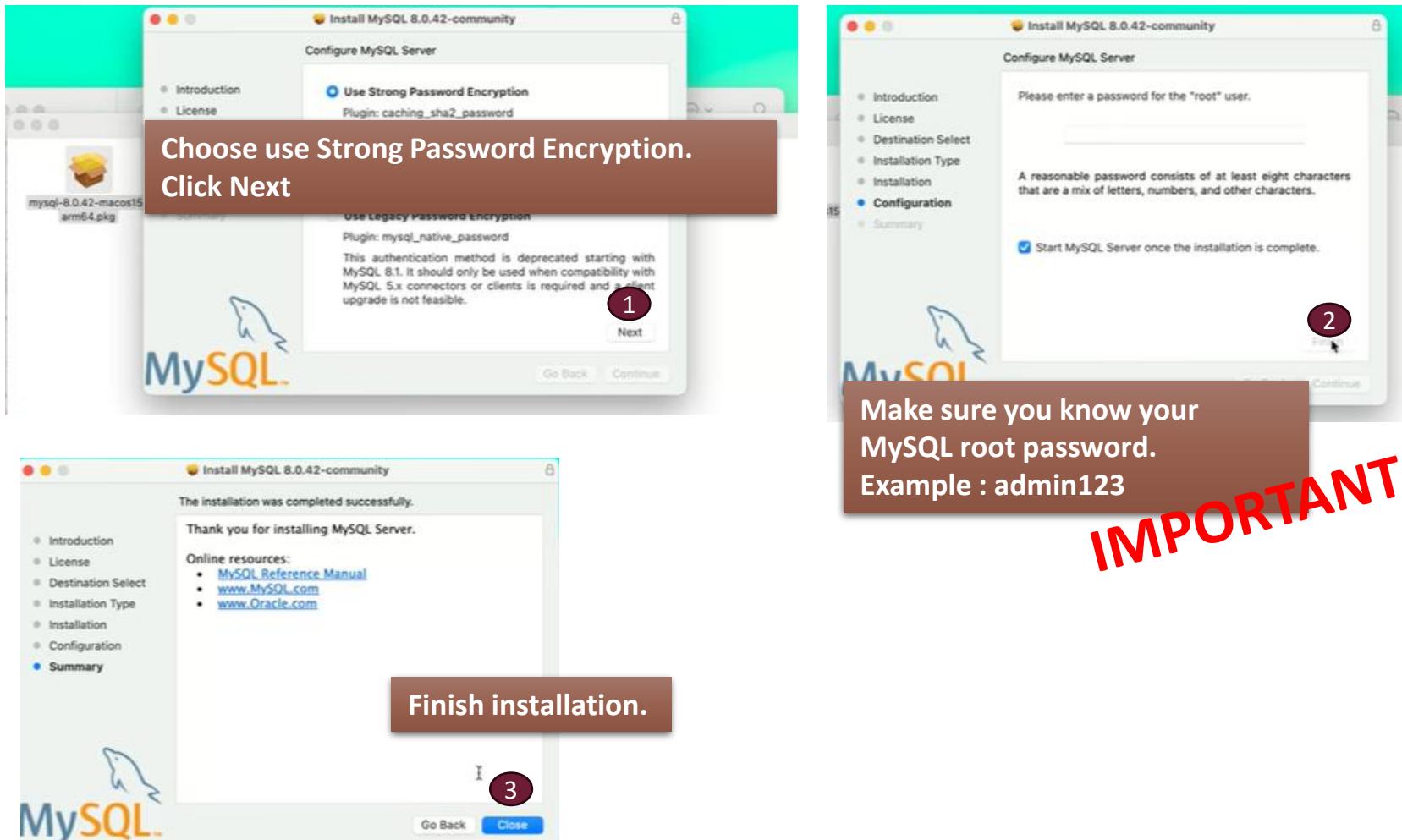


Choose to Install

3

# Step 1

## Download MySQL Installer (Mac)



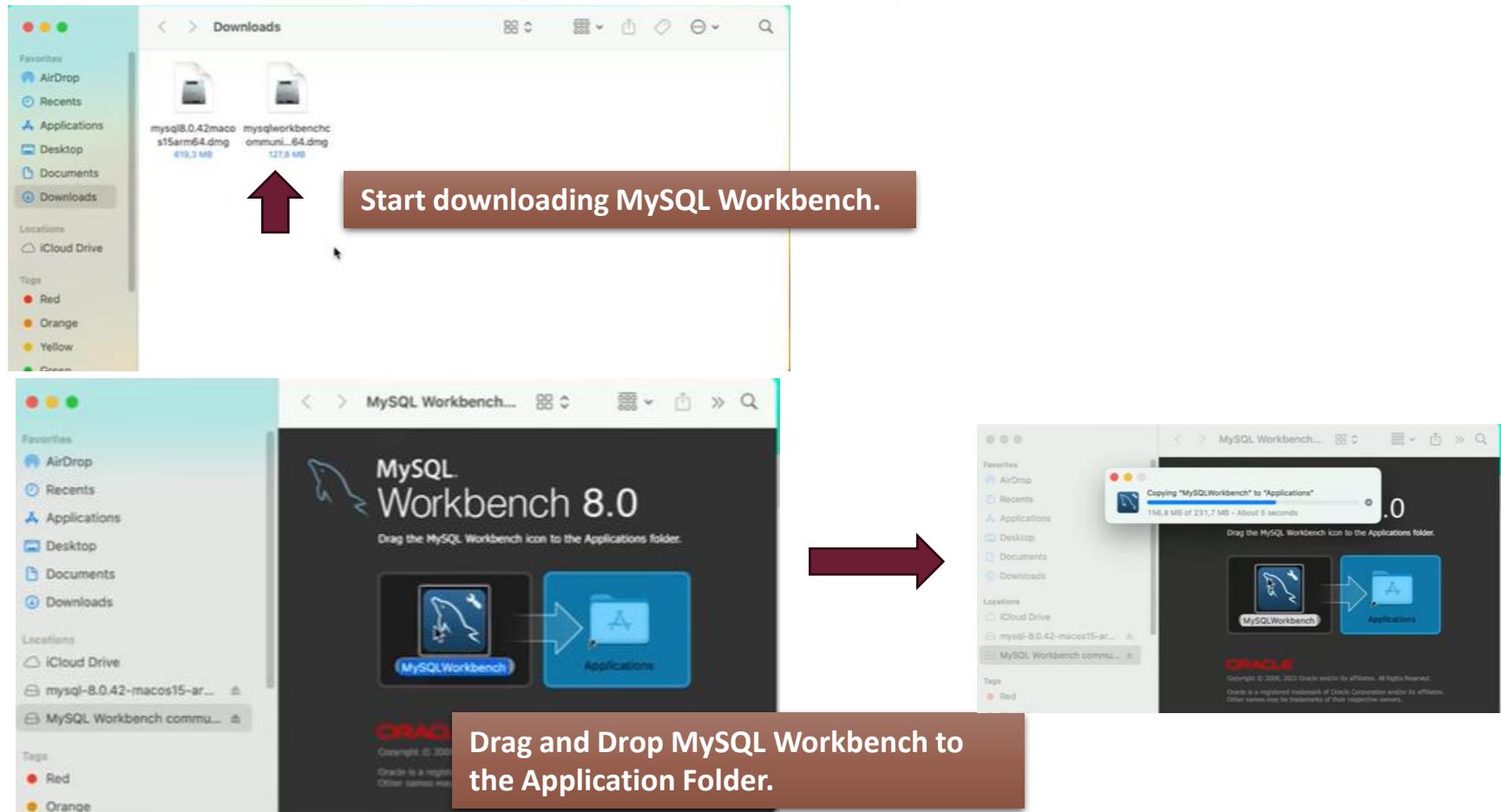
The screenshots illustrate the MySQL 8.0.42-community Mac installer's password configuration steps:

- Screenshot 1:** Shows the "Configure MySQL Server" step with two options: "Use Strong Password Encryption" (selected) and "Use Legacy Password Encryption". A callout box says: "Choose use Strong Password Encryption. Click Next". Number 1 is circled around the "Next" button.
- Screenshot 2:** Shows the "Configuration" step where a root password is being entered. A callout box says: "Make sure you know your MySQL root password. Example : admin123". Number 2 is circled around the "Continue" button.
- Screenshot 3:** Shows the "Summary" step confirming the installation was successful. A callout box says: "Finish installation.". Number 3 is circled around the "Close" button.

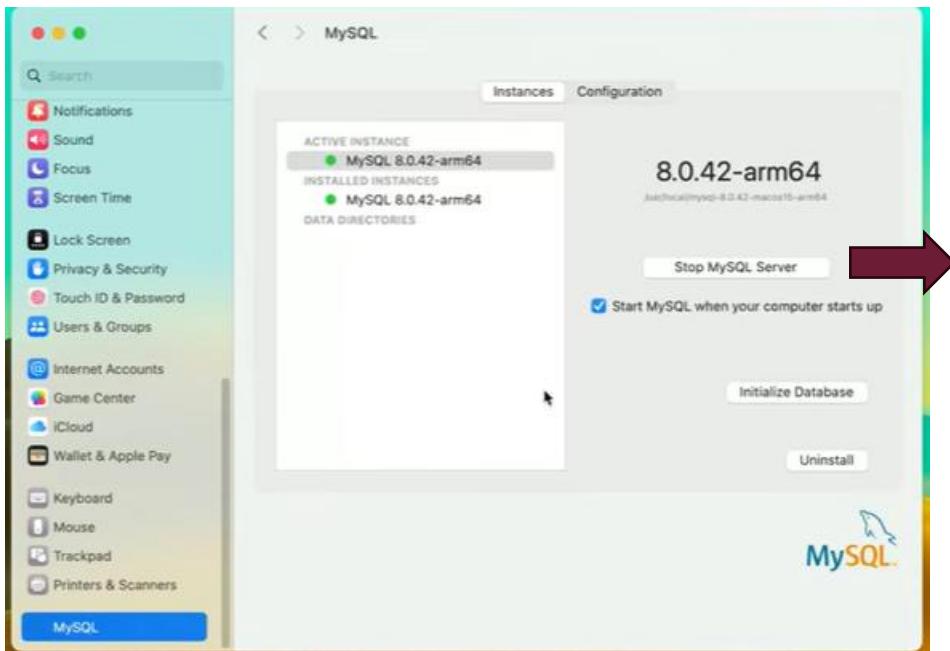
**IMPORTANT**

# Step 2

## Download MySQL Workbench (Mac)



# Step 3 Access MySQL (Mac)



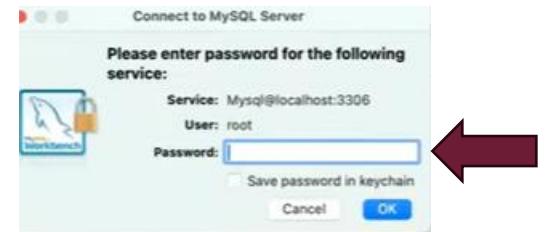
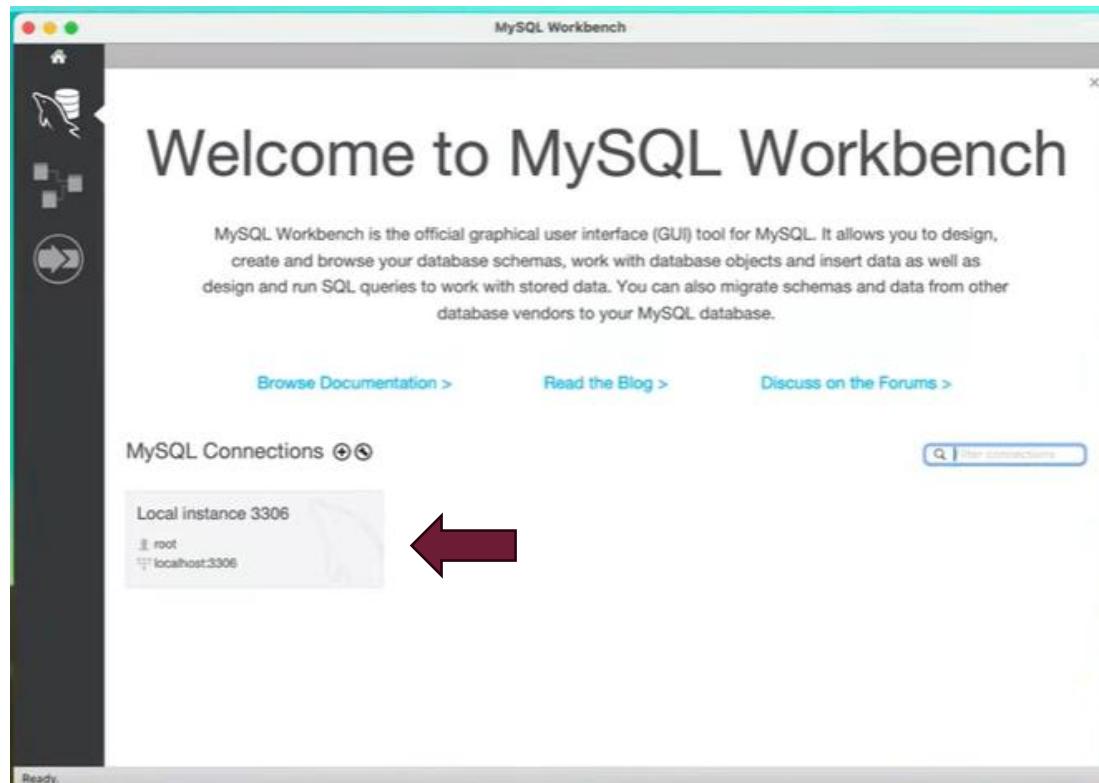
MySQL Server Instance is running (In Settings).

You can start and stop server here



# Step 3

## Access MySQL Workbench (Mac)



Key in the password and access the workbench

# Step 4

## MySQL Terminal Configuration (Mac)

- Check which terminal you are using with this command:

```
echo $SHELL
```

1

- If you get `/bin/zsh` then execute this line to configure MySQL:

```
Bash
echo "export PATH=\${PATH}:/usr/local/mysql/bin" >> ~/.zshrc
```

Copy

This is based on the output you  
get

- Otherwise, if you get `/bin/bash` then execute this line instead:

```
echo "export PATH=\${PATH}:/usr/local/mysql/bin" >> ~/.bash_profile
```

2

Command to start MySQL in the terminal:

```
mysql -u root -p
```

```
zarko@Zarko ~ % mysql --version
mysql Ver 8.4.3 for macos14 on arm64 (MySQL Community Server - GPL)
zarko@Zarko ~ % mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.4.3 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
```

mysql> SHOW

3

4

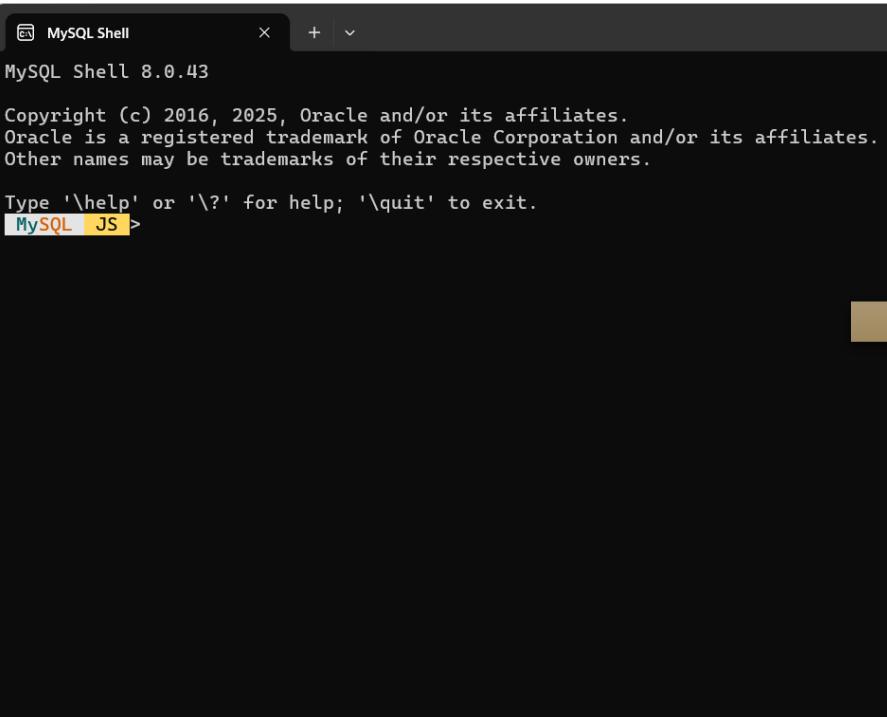
# Verification after Installation



# MySQL Shell (Windows)

After installation:

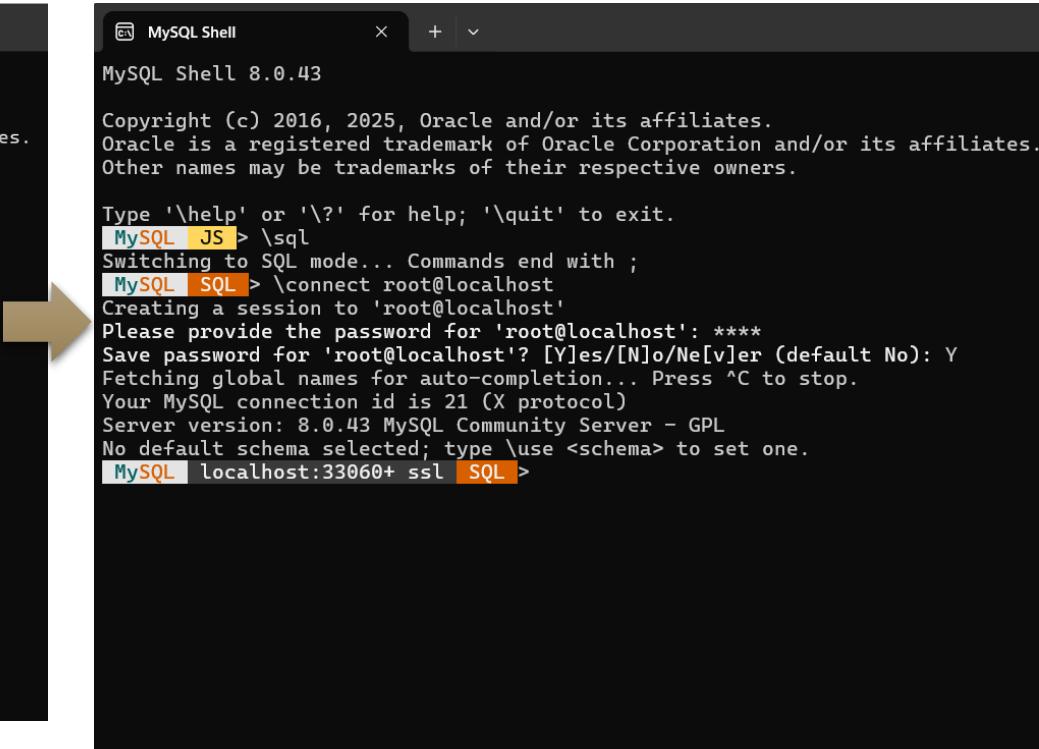
- Test MySQL Shell



```
MySQL Shell 8.0.43

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Type '\help' or '\?' for help; '\quit' to exit.
MySQL JS >
```



```
MySQL Shell 8.0.43

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Type '\help' or '\?' for help; '\quit' to exit.
MySQL JS > \sql
Switching to SQL mode... Commands end with ;
MySQL SQL > \connect root@localhost
Creating a session to 'root@localhost'
Please provide the password for 'root@localhost': ****
Save password for 'root@localhost'? [Y]es/[N]o/Ne[v]er (default No): Y
Fetching global names for auto-completion... Press ^C to stop.
Your MySQL connection id is 21 (X protocol)
Server version: 8.0.43 MySQL Community Server - GPL
No default schema selected; type \use <schema> to set one.
MySQL localhost:33060+ ssl SQL >
```

Your **MySQL Shell** is open and successfully switched to **SQL mode**, which means the installation was successful.

1. \sql
2. \connect root@localhost
3. Enter your password
4. Type Y to save password or N that indicated No save password.

# MySQL Shell (Mac/Windows)

- Once connected, create your practice database:

```
Create database student_test;
```

```
MySQL localhost:33060+ ssl SQL > Create database student_test;
Query OK, 1 row affected (0.0525 sec)
```

```
Use student_test;
```

```
MySQL localhost:33060+ ssl SQL > USE student_test;
Default schema set to `student_test`.
Fetching global names, object names from `student_test` for auto-completion... Press ^C to stop.
MySQL localhost:33060+ ssl student_test SQL >
```

This is to create table. Next, insert the data into table.

```
MySQL localhost:33060+ ssl student_test SQL > CREATE TABLE students (
->   student_id INT PRIMARY KEY,
->   name VARCHAR(50),
->   gender CHAR(1),
->   age INT,
->   course VARCHAR(50)
-> );
Query OK, 0 rows affected (0.1007 sec)
MySQL localhost:33060+ ssl student_test SQL >
```

# MYSql Shell (Mac/Windows)

Insert the following data in MYSQL shell.

```
MySQL localhost:33060+ ssl student_test SQL > INSERT INTO students VALUES  
-> (1, 'Ali', 'M', 21, 'Computer Science'),  
-> (2, 'Sara', 'F', 22, 'Information Systems'),  
-> (3, 'John', 'M', 20, 'Software Engineering'),  
-> (4, 'Mira', 'F', 23, 'Data Science'),  
-> (5, 'Raj', 'M', 24, 'Cybersecurity');
```

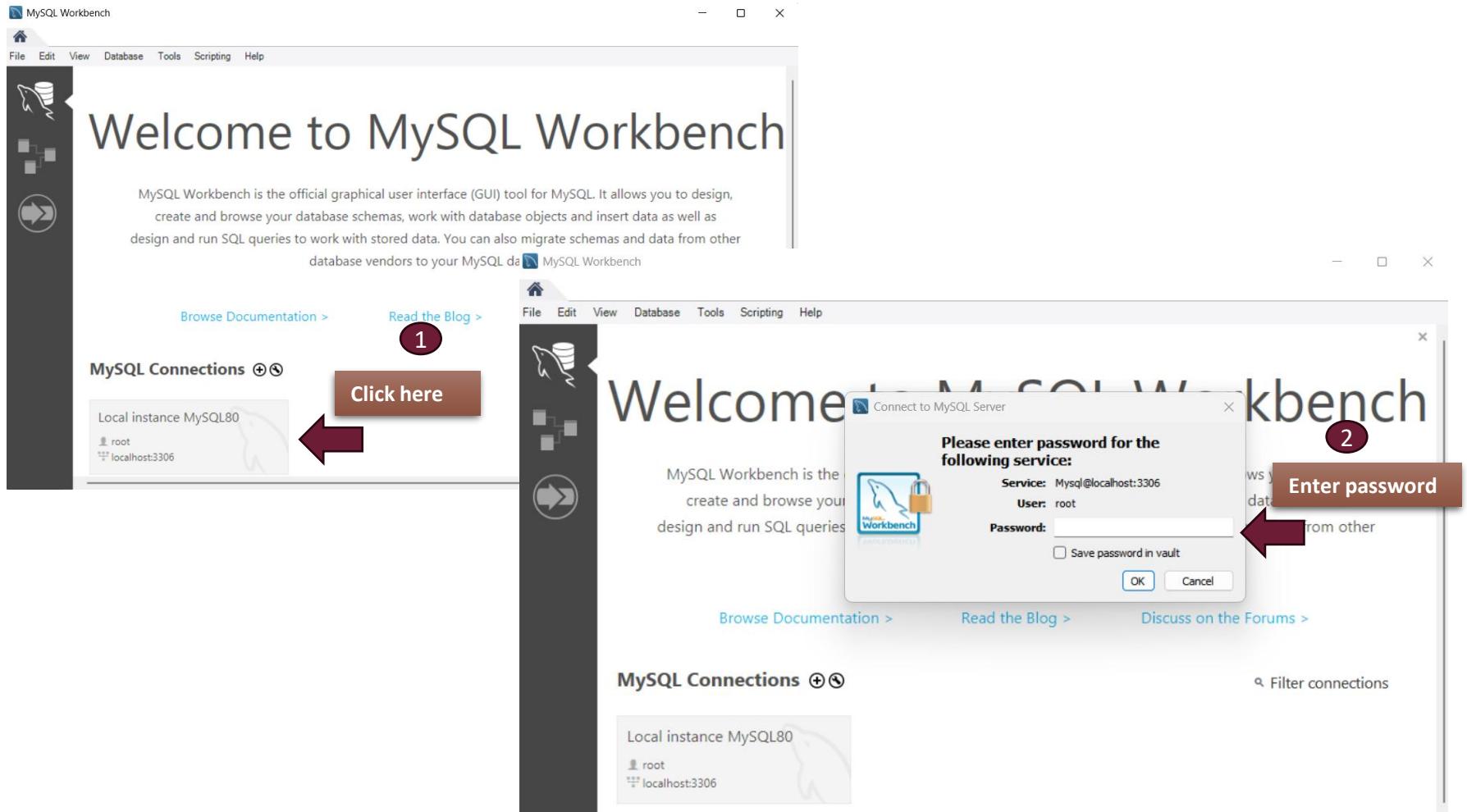
```
Query OK, 5 rows affected (0.0257 sec)
```

```
Records: 5  Duplicates: 0  Warnings: 0
```

# MySQL WorkBench (Mac/Windows)

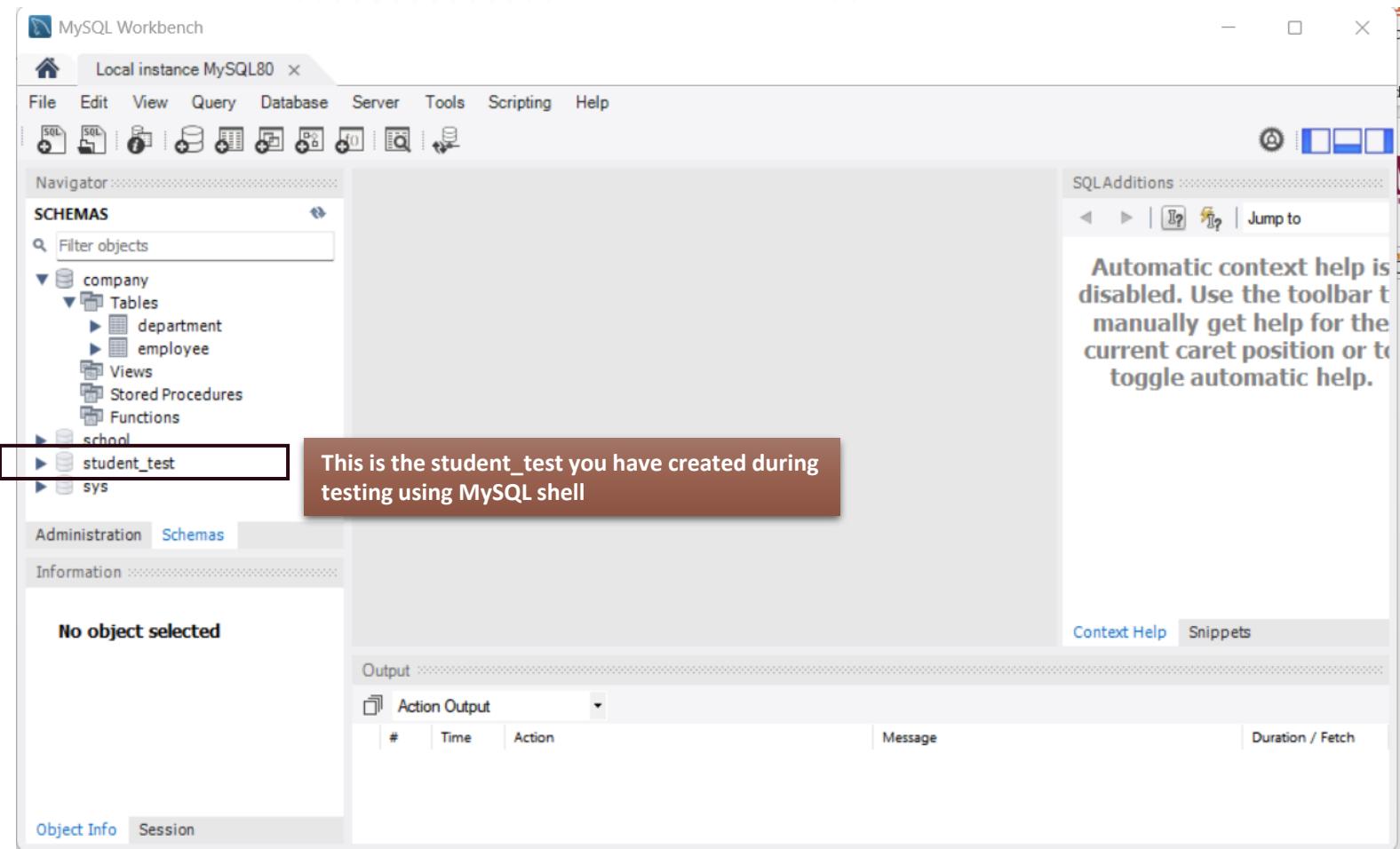
After installation:

- Test MySQL WorkBench



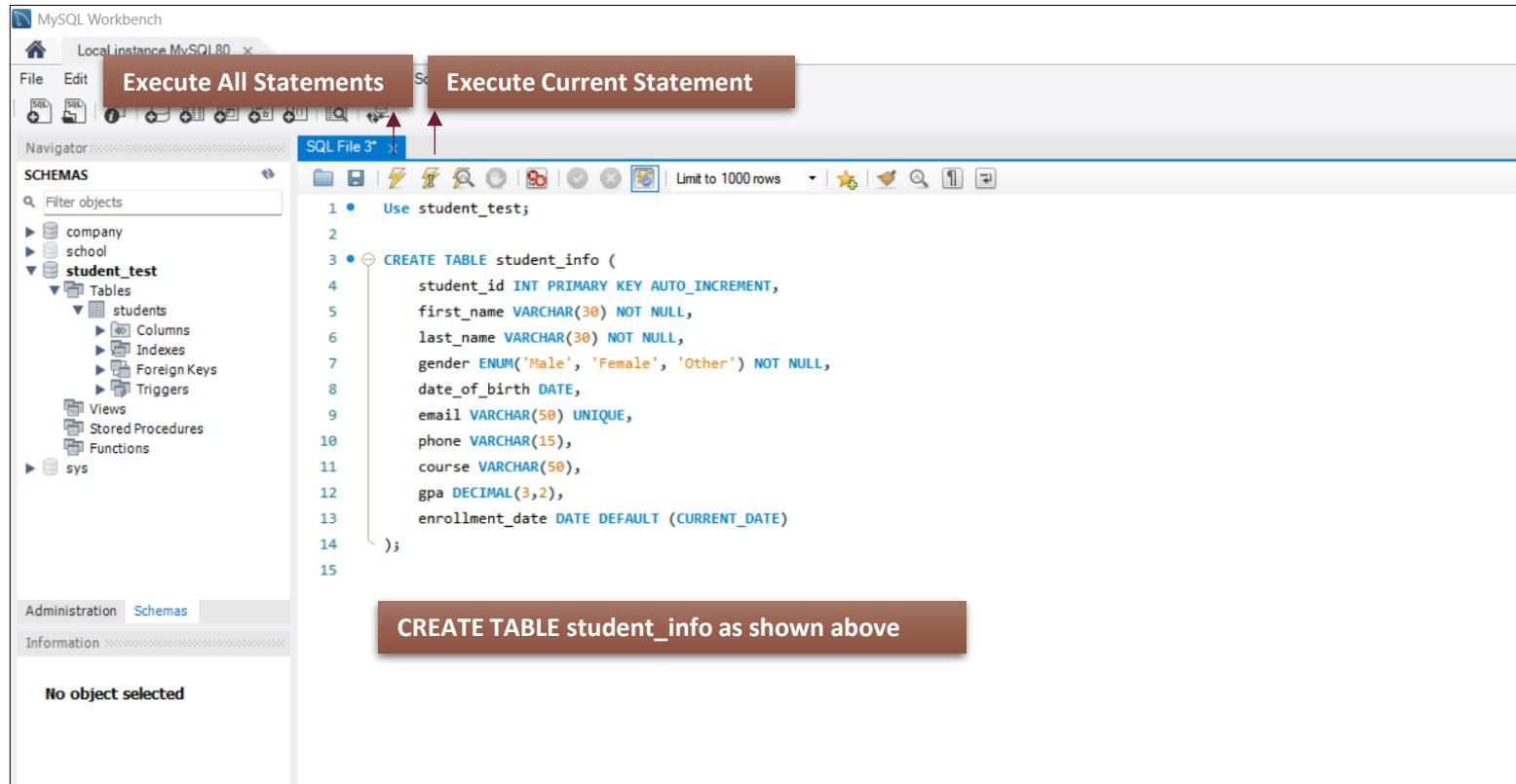
# MySQL WorkBench (Mac/Windows)

This will be your view



# MySQL WorkBench (Mac/Windows)

Once connected, create your practice table:



The screenshot shows the MySQL WorkBench interface. The left sidebar displays the schema structure under 'student\_test'. The central pane shows the SQL editor with the following code:

```

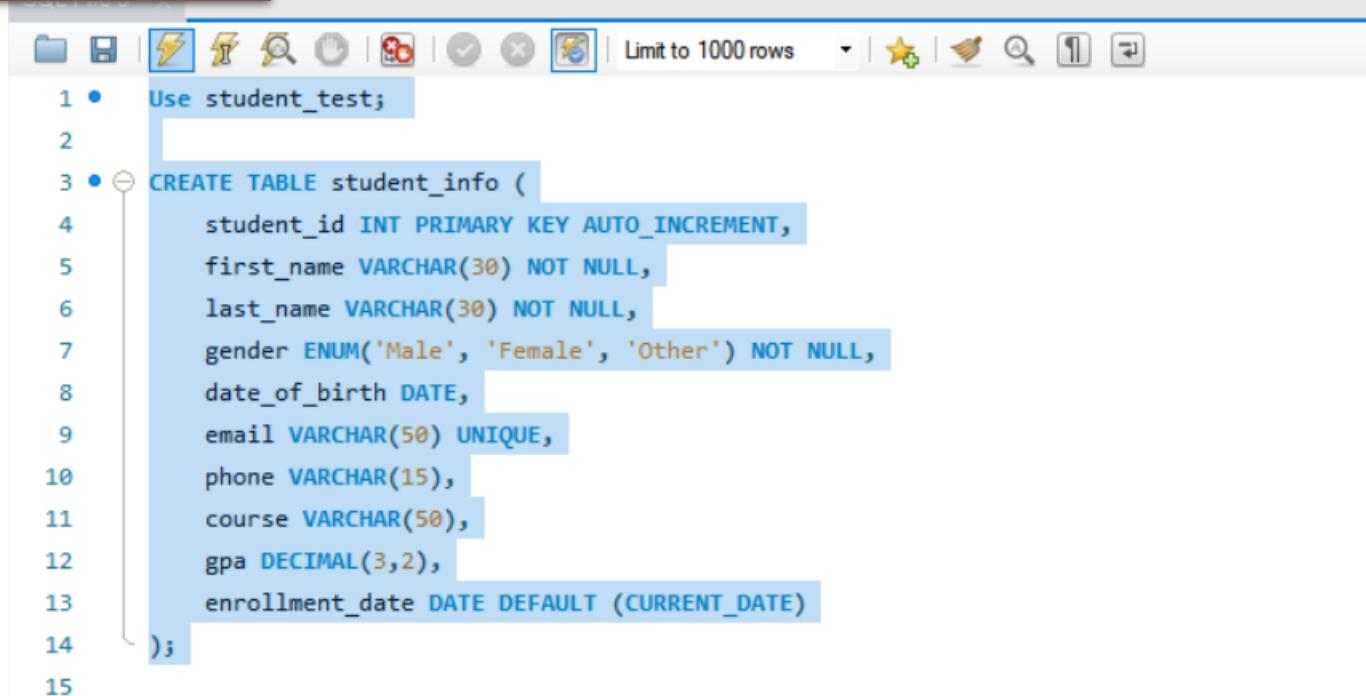
1 • Use student_test;
2
3 • CREATE TABLE student_info (
4     student_id INT PRIMARY KEY AUTO_INCREMENT,
5     first_name VARCHAR(30) NOT NULL,
6     last_name VARCHAR(30) NOT NULL,
7     gender ENUM('Male', 'Female', 'Other') NOT NULL,
8     date_of_birth DATE,
9     email VARCHAR(50) UNIQUE,
10    phone VARCHAR(15),
11    course VARCHAR(50),
12    gpa DECIMAL(3,2),
13    enrollment_date DATE DEFAULT (CURRENT_DATE)
14 );
15

```

Two buttons are highlighted at the top of the SQL editor: 'Execute All Statements' and 'Execute Current Statement'. A callout box at the bottom of the editor area contains the text: 'CREATE TABLE student\_info as shown above'.

# MySQL WorkBench (Mac/Windows)

Execute All Statements

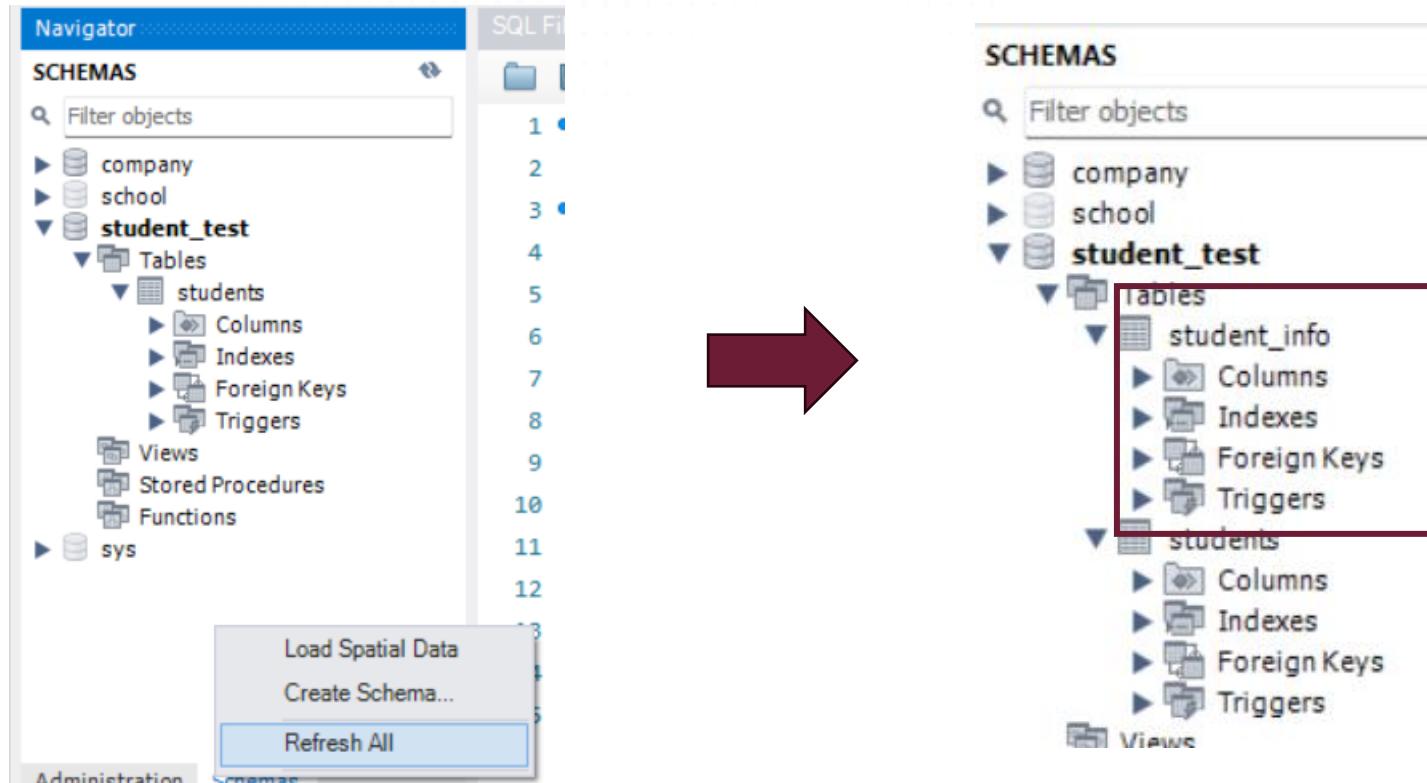


```
1 • Use student_test;
2
3 • CREATE TABLE student_info (
4     student_id INT PRIMARY KEY AUTO_INCREMENT,
5     first_name VARCHAR(30) NOT NULL,
6     last_name VARCHAR(30) NOT NULL,
7     gender ENUM('Male', 'Female', 'Other') NOT NULL,
8     date_of_birth DATE,
9     email VARCHAR(50) UNIQUE,
10    phone VARCHAR(15),
11    course VARCHAR(50),
12    gpa DECIMAL(3,2),
13    enrollment_date DATE DEFAULT (CURRENT_DATE)
14 );
15
```

Make sure action output green in color



Output		
#	Time	Action
5	13:11:31	Use student_test
Message		0 row(s) affected
Duration / Fetch		0.000 sec



The screenshot shows a database management interface with two main panes: Navigator and SQL Editor.

**Navigator Pane:**

- SCHEMAS:**
  - company
  - school
  - student\_test** (selected)
    - Tables**
      - students
        - Columns
        - Indexes
        - Foreign Keys
        - Triggers
      - Views
      - Stored Procedures
      - Functions
  - sys
- Administration** tab is selected.
- A context menu is open over the **student\_test** schema, showing options: Load Spatial Data, Create Schema..., and Refresh All. The **Refresh All** option is highlighted.

**SQL Editor Pane:**

- SCHEMAS:**
  - company
  - school
  - student\_test**
    - Tables**
      - student\_info**
        - Columns
        - Indexes
        - Foreign Keys
        - Triggers
      - students
        - Columns
        - Indexes
        - Foreign Keys
        - Triggers
    - Views

Right Click and Refresh All to view the updated Tables

# Other resources

- You may also refer to following link for reference on installing MySql:
- <https://www.youtube.com/watch?v=05-C-vHN8p4> (Windows)
- <https://www.youtube.com/watch?v=wpGnJHb2R58&t=336s> (Mac)
- <https://zarkomaslaric.notion.site/Zarko-s-Video-Tutorial-MySQL-Installation-on-Mac-14cfe1ebfde2804c933fecff0e02ca51> (Mac)

*(For the provided link for Mac IGNORE the installation of Dbeaver. For this course, you are only required to install MySQL Workbench and MySQL Shell).*

# THANK YOU



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