

MySql DBMS 설치

(DataBase Management System)

Workbench는 MySql DB 서버 및 GUI 클라이언트 프로그램을 모두 설치해주는 tool

Down load site

<https://downloads.mysql.com/archives/community/>

Mac인 경우 아래 사이트 참고

https://velog.io/@mingle_1017/MySql-%EC%84%A4%EC%B9%98-%EB%B0%8F-%ED%85%8C%EC%9D%B4%EB%B8%94-%EC%83%9D%EC%84%B1%ED%95%98%EA%B8%B0%EB%A7%A5%EB%B6%81-%EB%B2%84%EC%A0%84

컴퓨터 OS에 맞는 workbench를 선택하고 다운로드 받는다.

Product Version: 8.2.0
Operating System: Microsoft Windows

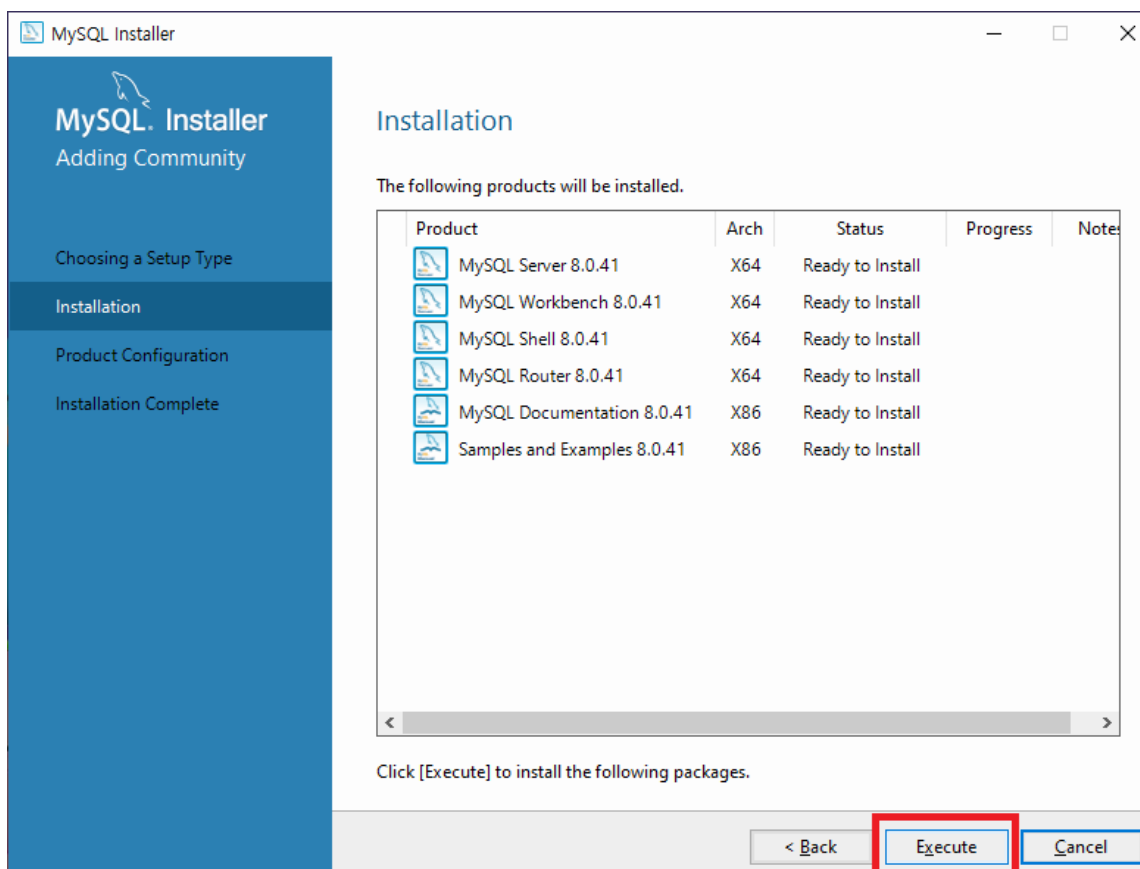
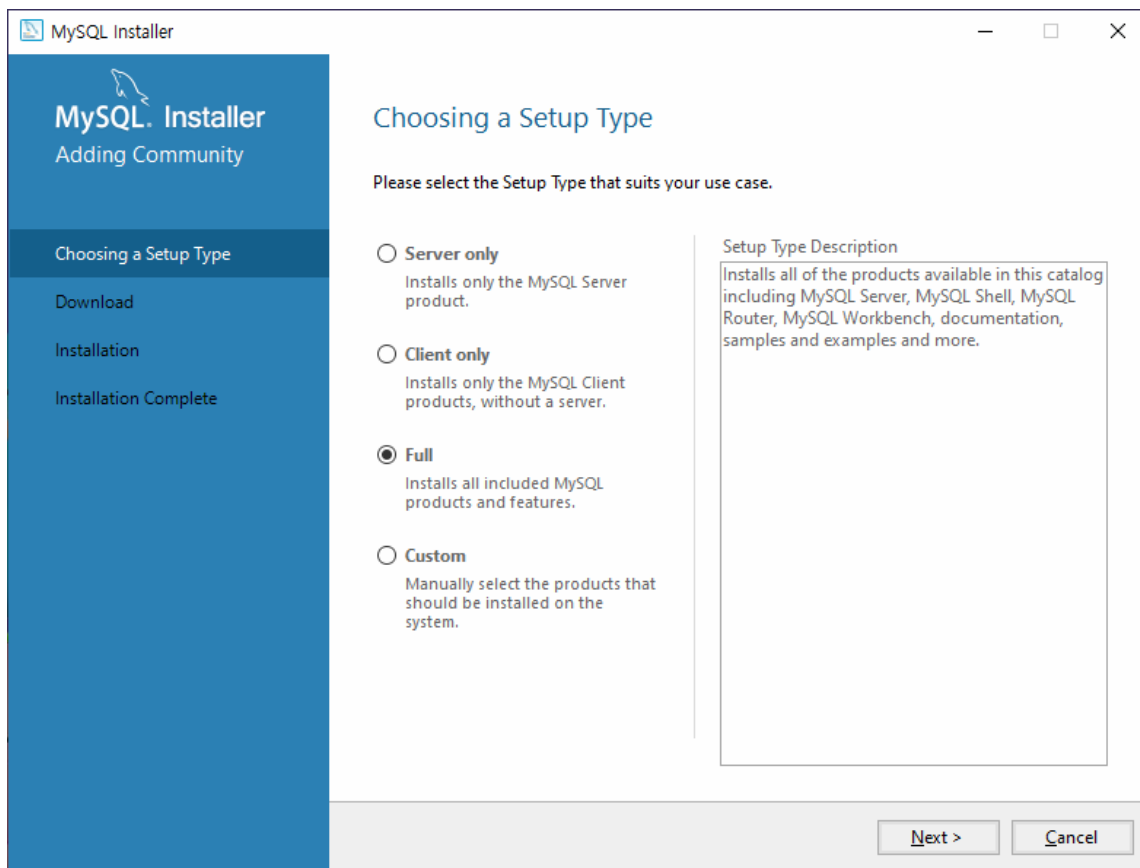
버전과 OS 선택한다

Windows (x86, 64-bit), MSI Installer (mysql-8.2.0-winx64.msi)	Oct 13, 2023	130.4M	Download
Windows (x86, 64-bit), ZIP Archive (mysql-8.2.0-winx64.zip)	Oct 12, 2023	241.5M	Download
Windows (x86, 64-bit), ZIP Archive Debug Binaries & Test Suite (mysql-8.2.0-winx64-debug-test.zip)	Oct 12, 2023	683.5M	Download

MD5: 74654eaae0e0cd8f1329f8cc91279f63 | Signature

MD5: e0b9ac00cf136a40020e579a33d080db | Signature

MD5: 973451e4c2c3cdab210d24d64bfb1d31 | Signature



MySQL Installer

MySQL Server 8.0.41

Type and Networking

Authentication Method

Accounts and Roles

Windows Service

Server File Permissions

Apply Configuration

Type and Networking

Server Configuration Type

Choose the correct server configuration type for this MySQL Server installation. This setting will define how much system resources are assigned to the MySQL Server instance.

Config Type:

Connectivity

Use the following controls to select how you would like to connect to this server.

☒ TCP/IP

☒ Open Windows Firewall ports for network access

☐ Named Pipe

☐ Shared Memory

Advanced Configuration

Select the check box below to get additional configuration pages where you can set advanced and logging options for this server instance.

☐ Show Advanced and Logging Options

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Authentication Method

☒ 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.



Attention: This new authentication plugin on the server side requires new versions of connectors and clients which add support for this new 8.0 default authentication (caching_sha2_password authentication).

Currently MySQL 8.0 Connectors and community drivers which use libmysqlclient 8.0 support this new method. If clients and applications cannot be updated to support this new authentication method, the MySQL 8.0 Server can be configured to use the legacy MySQL Authentication Method below.

☐ 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.

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

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Accounts and Roles

Root Account Password
Enter the password for the root account. Please remember to store this password in a secure place.

MySQL Root Password:

Repeat Password:

Password strength: **Weak**

MySQL User Accounts
Create MySQL user accounts for your users and applications. Assign a role to the user that consists of a set of privileges.

MySQL User Name	Host	User Role

Add User (button highlighted with a red box)

Edit User (button)

Delete (button)

새로운 계정 생성을 위해 Add User 버튼 클릭


< Back Next > Cancel

계정 명과 비밀 번호를 입력한다. Host는 기본 설정인 All Hosts로 한다

*** All Hosts는 외부의 접속을 허용하는 것으로 다른 외부 프로그램(client, 자바, python 등)에서 접속해야 하므로 반드시 All Hosts의 권한을 설정해야 된다.

MySQL User Account

Please specify the user name, password, and database role.

 User Name:

Host:

Role:

Authentication: ☒ MySQL

MySQL user credentials

Password:

Confirm Password:

Password strength: **Weak**

OK Cancel

MySQL Installer

MySQL Server 8.0.41

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Accounts and Roles


Root Account Password
Enter the password for the root account. Please remember to store this password in a secure place.

MySQL Root Password:

Repeat Password:

Password strength: **Weak**

MySQL User Accounts
Create MySQL user accounts for your users and applications. Assign a role to the user that consists of a set of privileges.

MySQL User Name	Host	User Role
 uereka	%	DB Admin

Add User

Edit User

Delete

< Back

Next >

Cancel

MySQL Installer

MySQL Server 8.0.41

Type and Networking

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Apply Configuration

Windows Service

☒ Configure MySQL Server as a Windows Service

Windows Service Details
Please specify a Windows Service name to be used for this MySQL Server instance. A unique name is required for each instance.

Windows Service Name:

☒ Start the MySQL Server at System Startup

Run Windows Service as ...
The MySQL Server needs to run under a given user account. Based on the security requirements of your system you need to pick one of the options below.

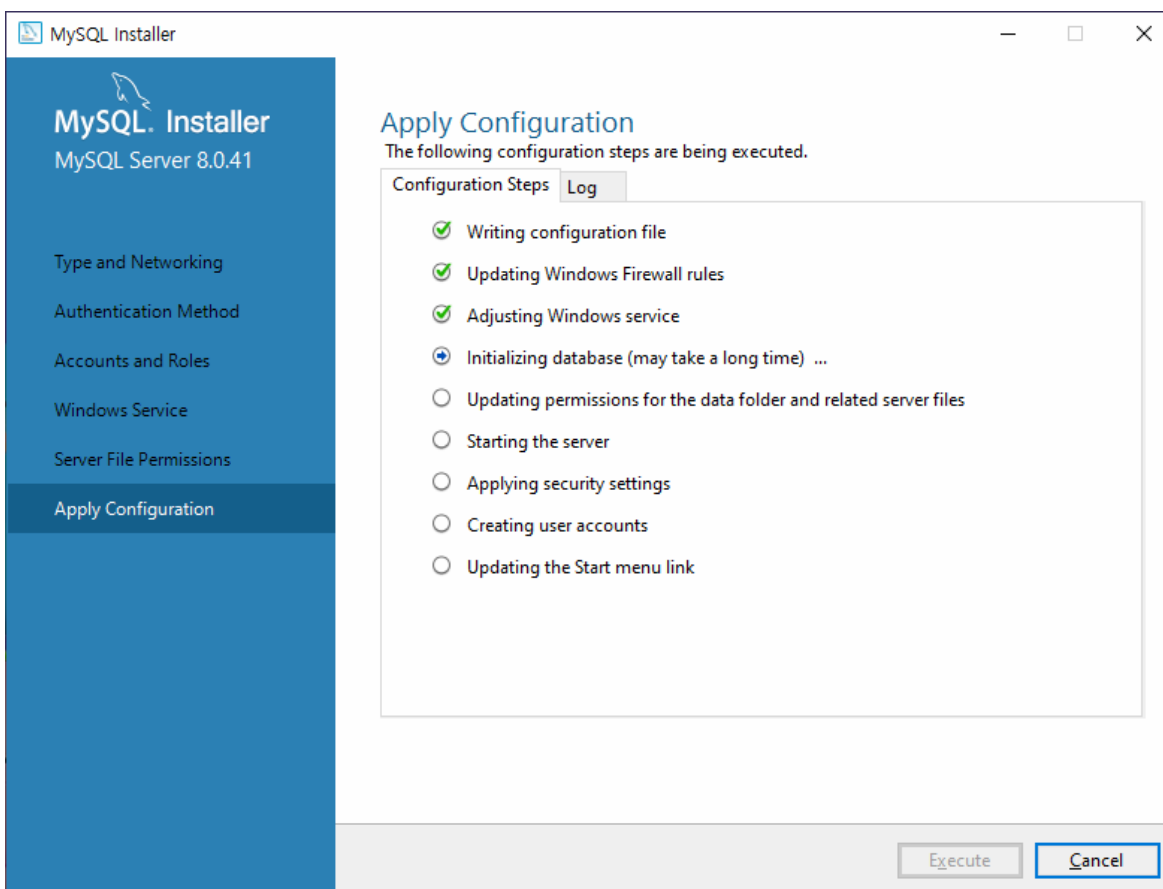
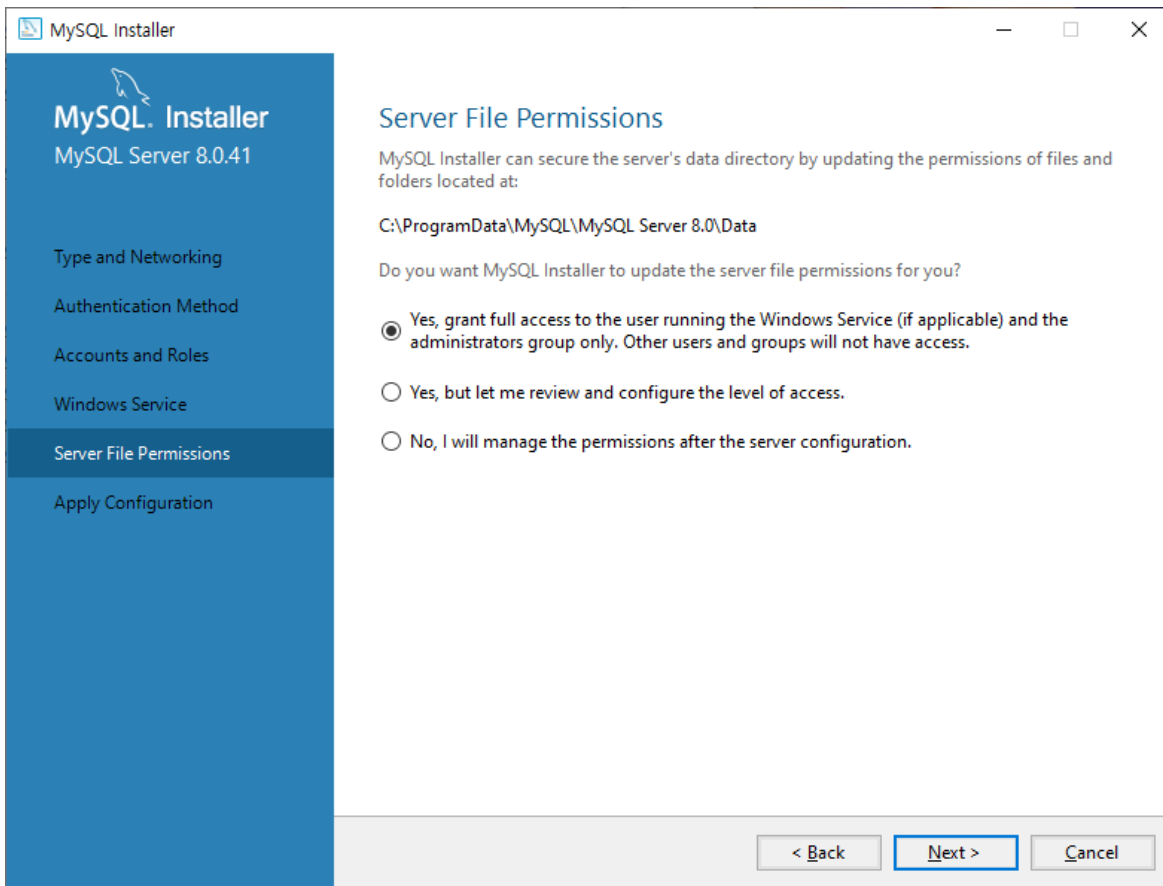
☒ **Standard System Account**
Recommended for most scenarios.

☐ **Custom User**
An existing user account can be selected for advanced scenarios.

< Back

Next >

Cancel



기본 DB Server 설치 끝났다. 하지만 다른 설정이 남아 있어 아래 화면이 나오면 next 버튼을 클릭한다.

MySQL Installer

Adding Community

Choosing a Setup Type

Installation

Product Configuration

Installation Complete

Product Configuration

We'll now walk through a configuration wizard for each of the following products.

You can cancel at any point if you wish to leave this wizard without configuring all the products.

Product	Status
MySQL Server 8.0.41	Configuration complete.
MySQL Router 8.0.41	Ready to configure
Samples and Examples 8.0.41	Ready to configure

Next >

Cancel

우리는 라우터를 사용하지 않기 때문에 default 설정으로 finish 버튼을 클릭해서 설치를 마무리 한다.

MySQL Installer

MySQL Router 8.0.41

MySQL Router Configuration

MySQL Router Configuration

☐ Bootstrap MySQL Router for use with InnoDB Cluster

This wizard can bootstrap MySQL Router to direct traffic between MySQL applications and InnoDB Cluster. Applications that connect to the router will be automatically directed to an available read/write or read-only member of the cluster.

The bootstrapping process requires a connection to InnoDB Cluster. In order to register the MySQL Router for monitoring, use the current Read/Write instance of the cluster.

Hostname: Port: Management User: Password:

Test Connection

MySQL Router requires specification of a base port (between 80 and 65532). The first port is used for classic read/write connections. The other ports are computed sequentially after the first port. If any port is indicated to be in use, please change the base port.

Classic MySQL protocol connections to InnoDB Cluster:

Read/Write: Read Only:

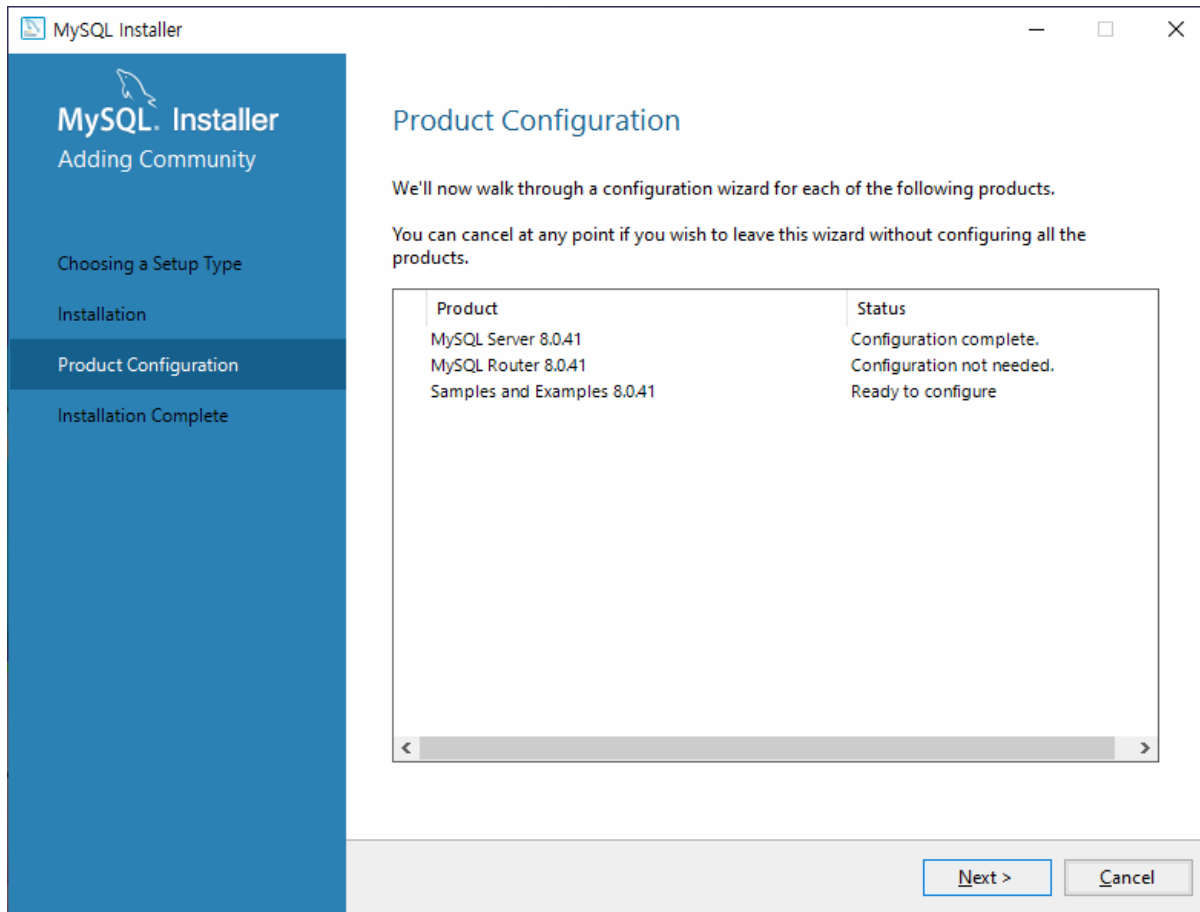
X Protocol connections to InnoDB Cluster:

Read/Write: Read Only:

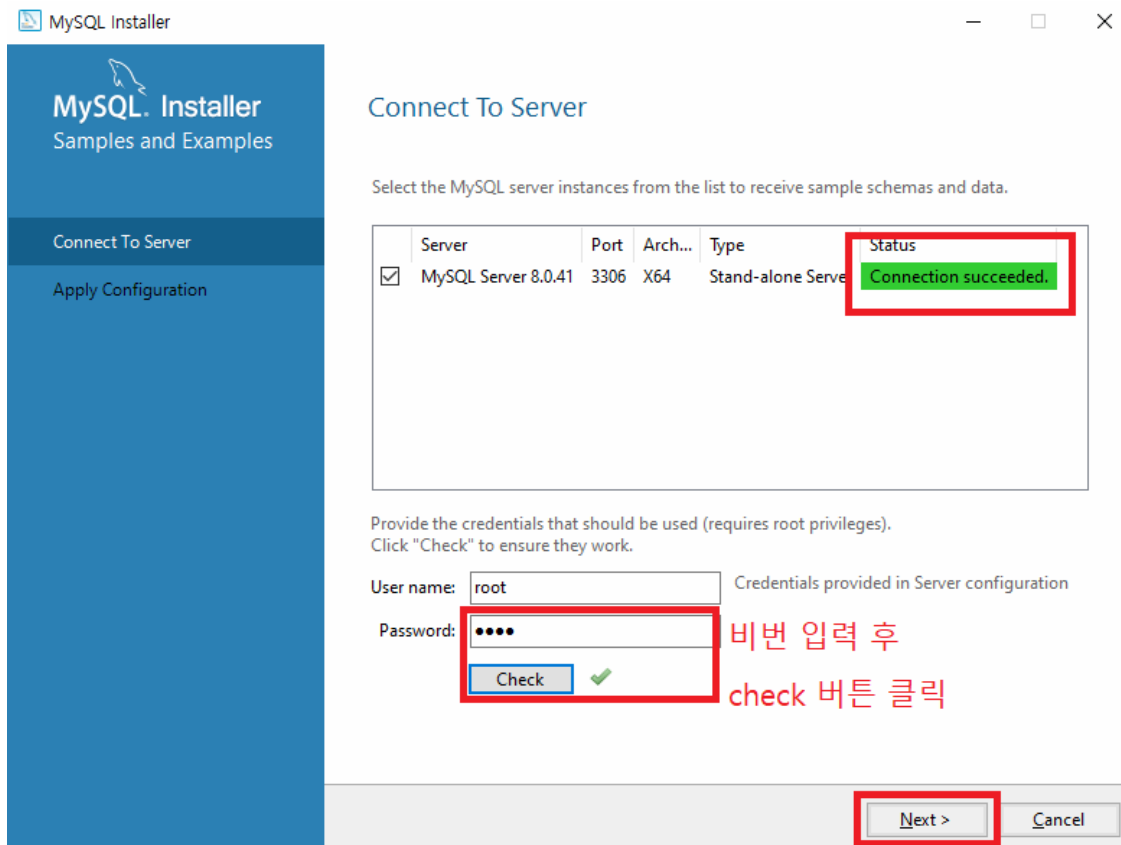
Finish

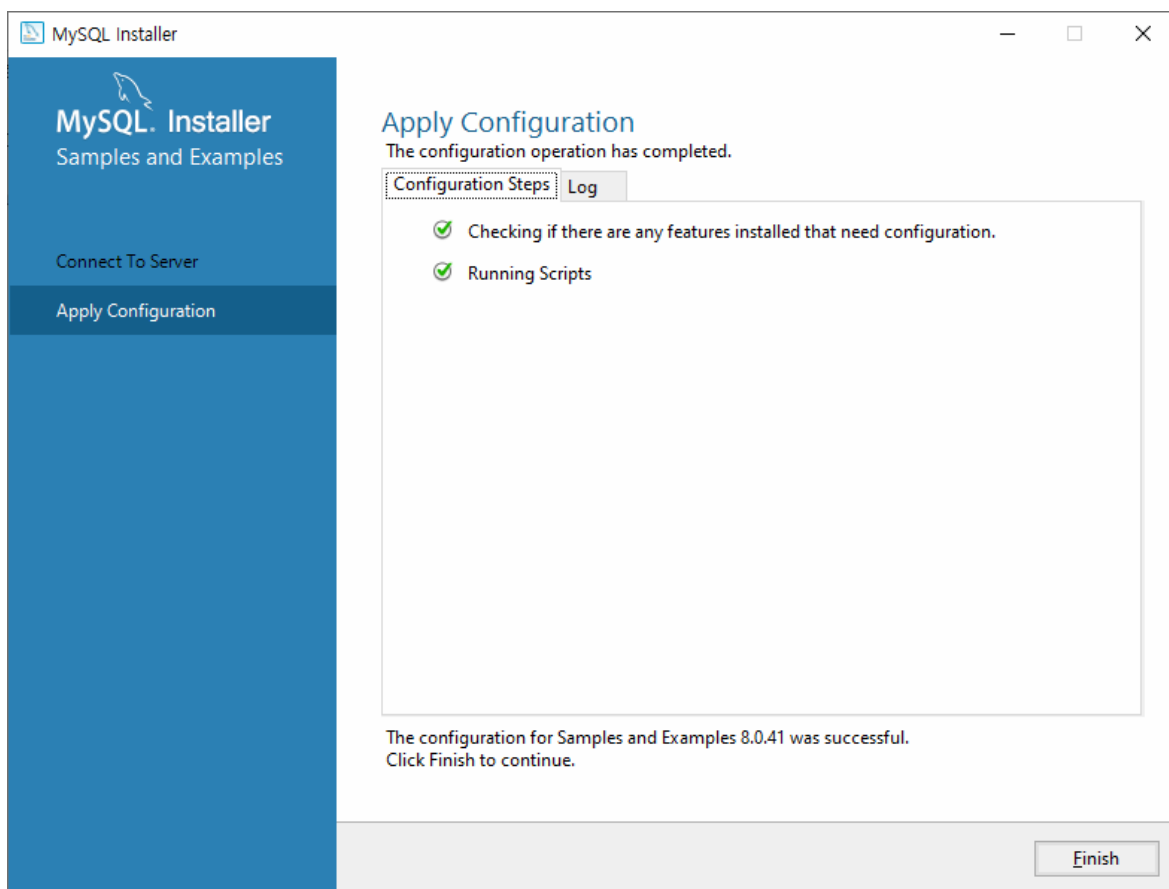
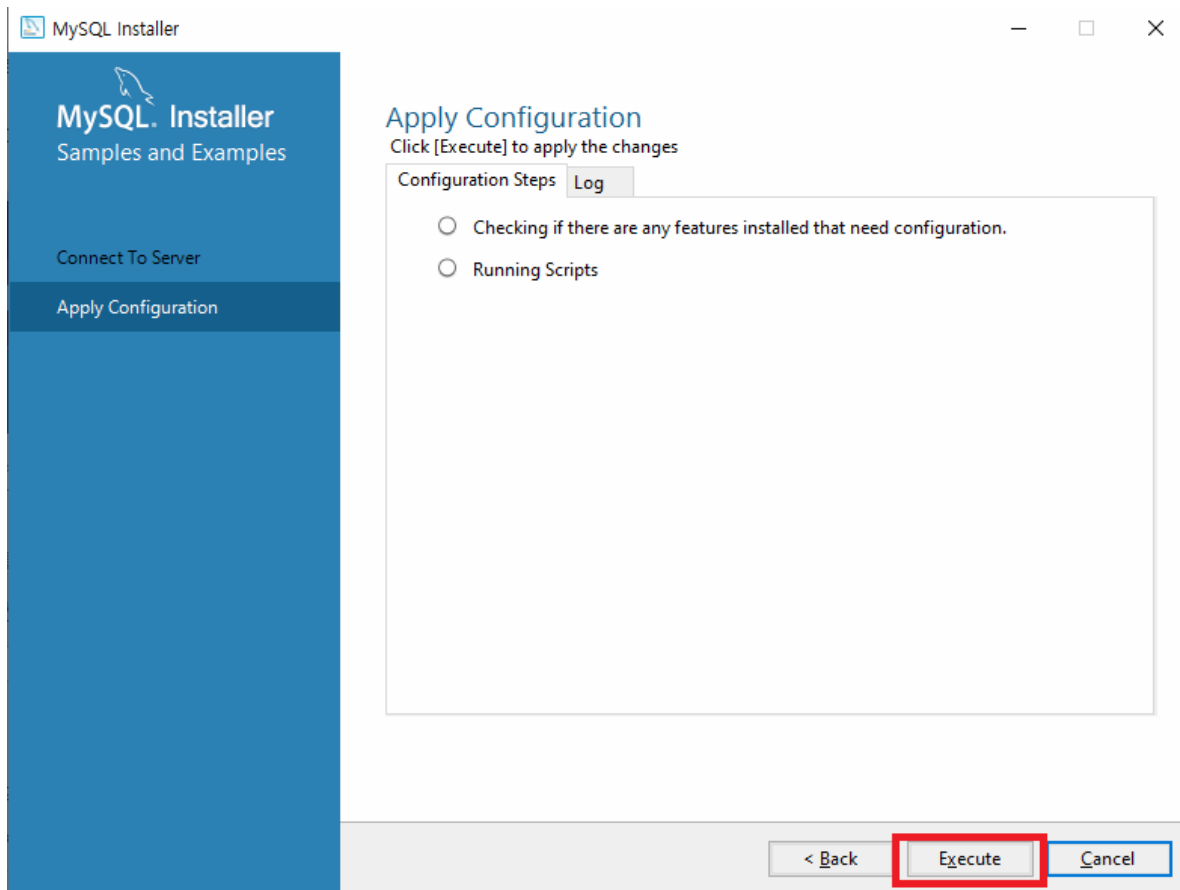
Cancel

마지막으로 예제로 사용할 스키마를 설치해야 한다. Next 버튼 클릭

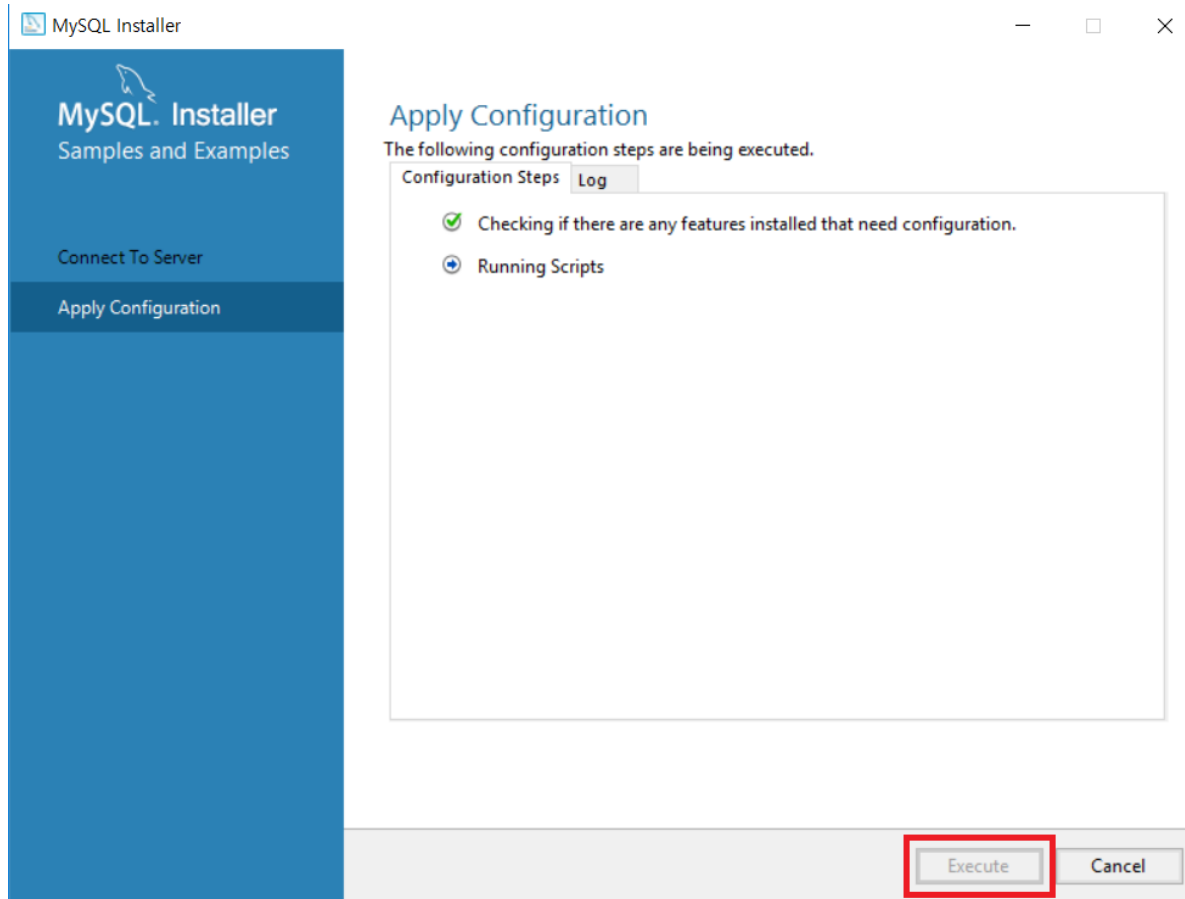


서버 연동이 잘 되는지 테스트를 해야 하므로 root 계정의 비밀번호를 입력 후 check 버튼을 클릭해 connection succeeded가 나오면 next 버튼을 클릭한다.



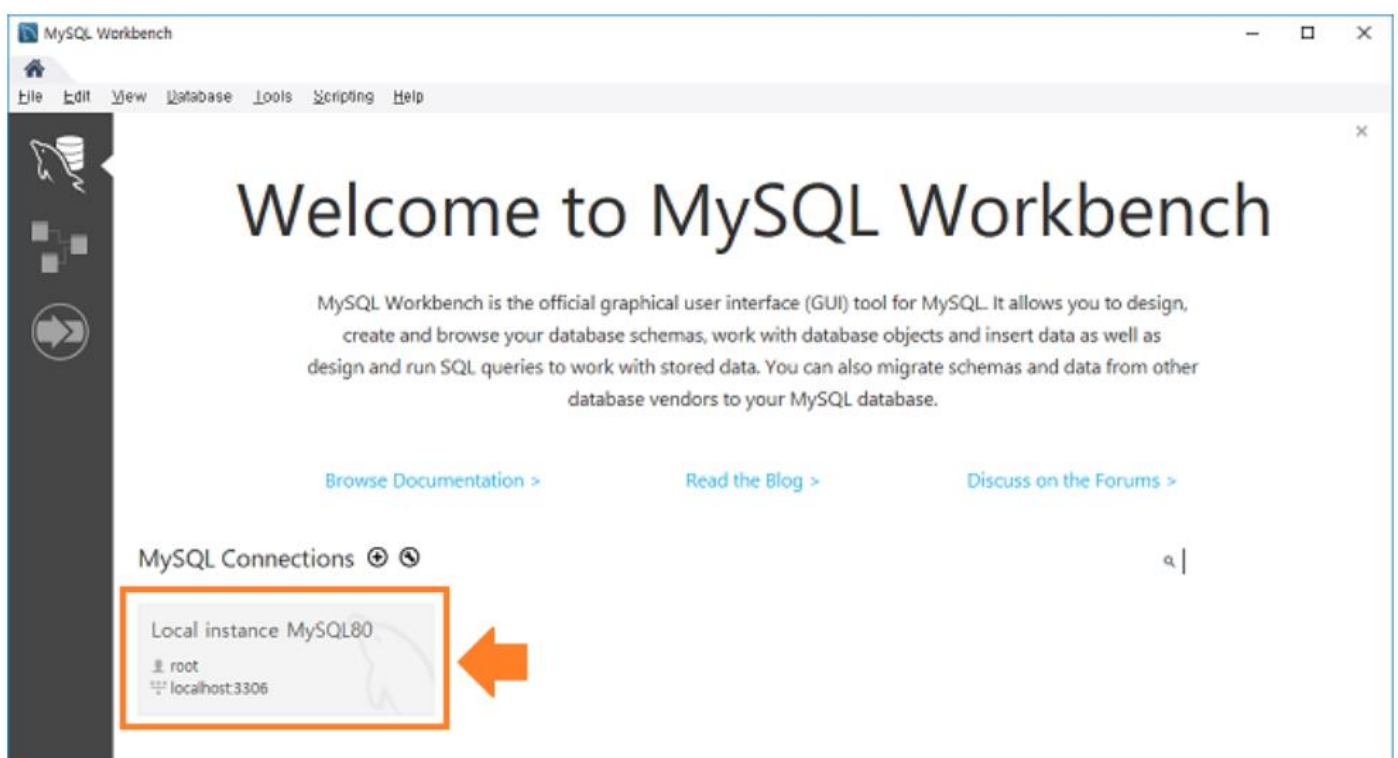


하지만 또 나온다. next

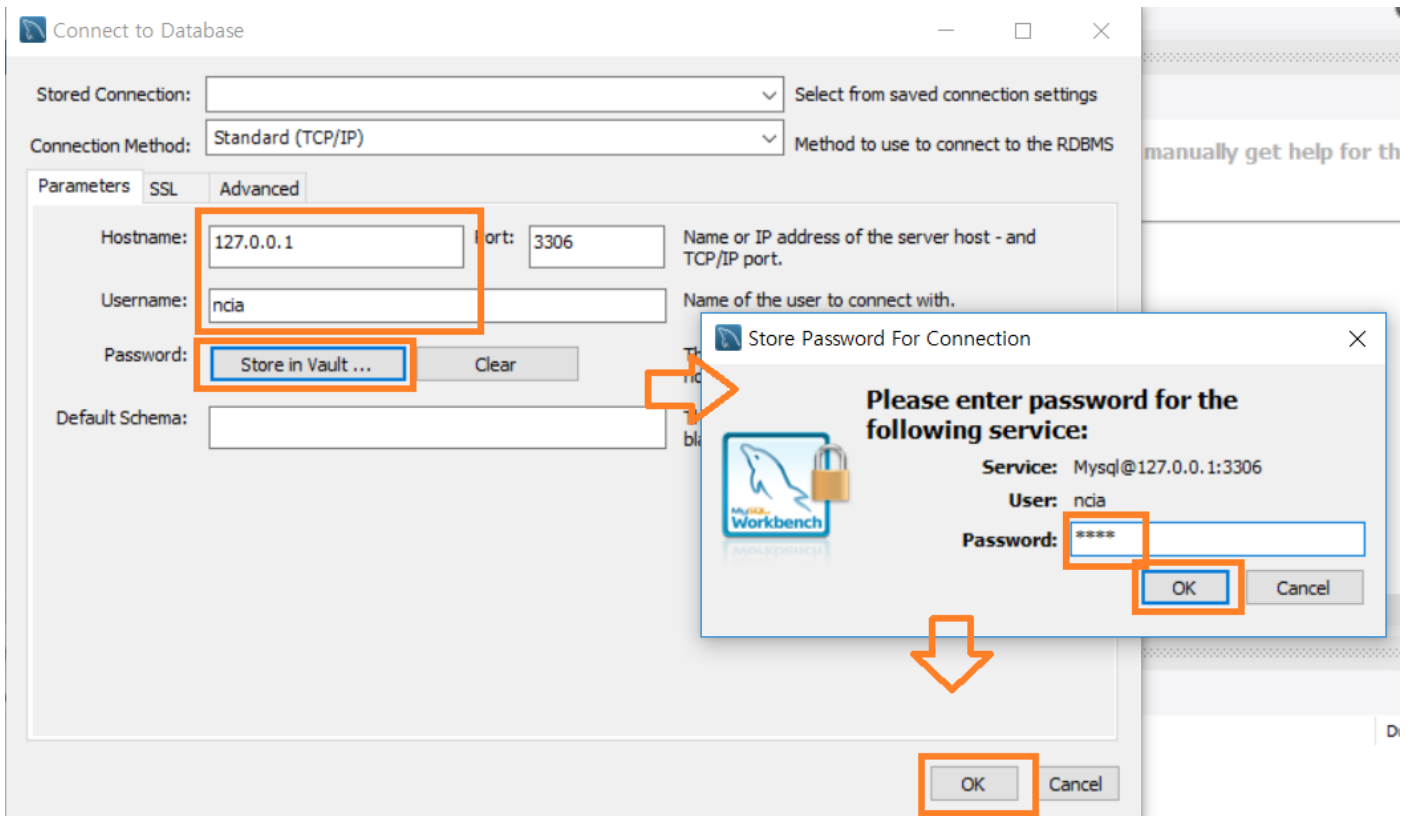
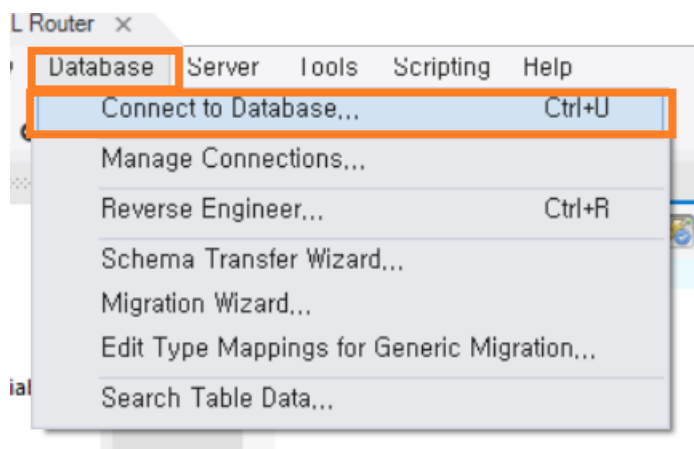


MySQL Workbench를 이용한 계정 접속 및 데이터베이스 스키마 작성

왼쪽 하단에 local instance Mysql8.0 선택

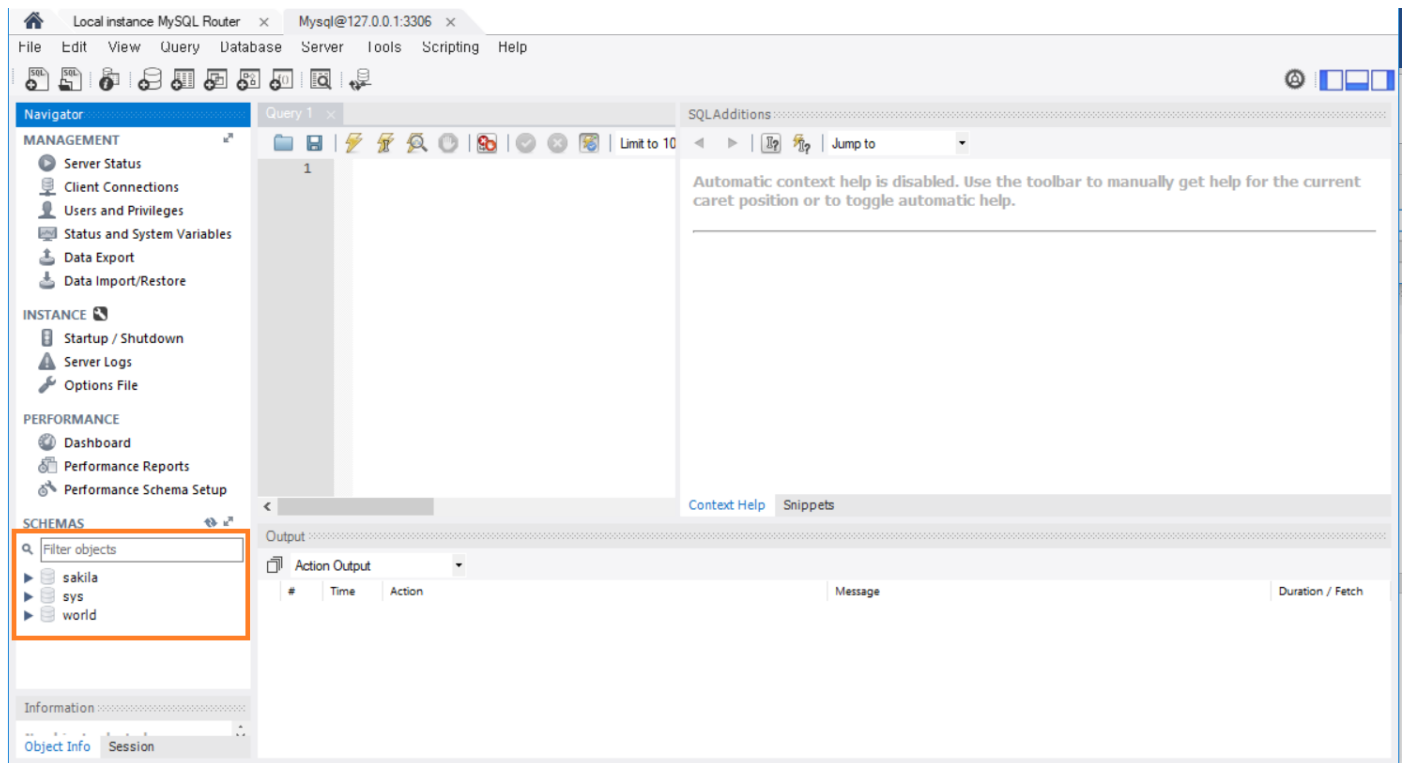


Root 계정 비밀번호 입력 후 ok 버튼 클릭



로그인 된 후 화면

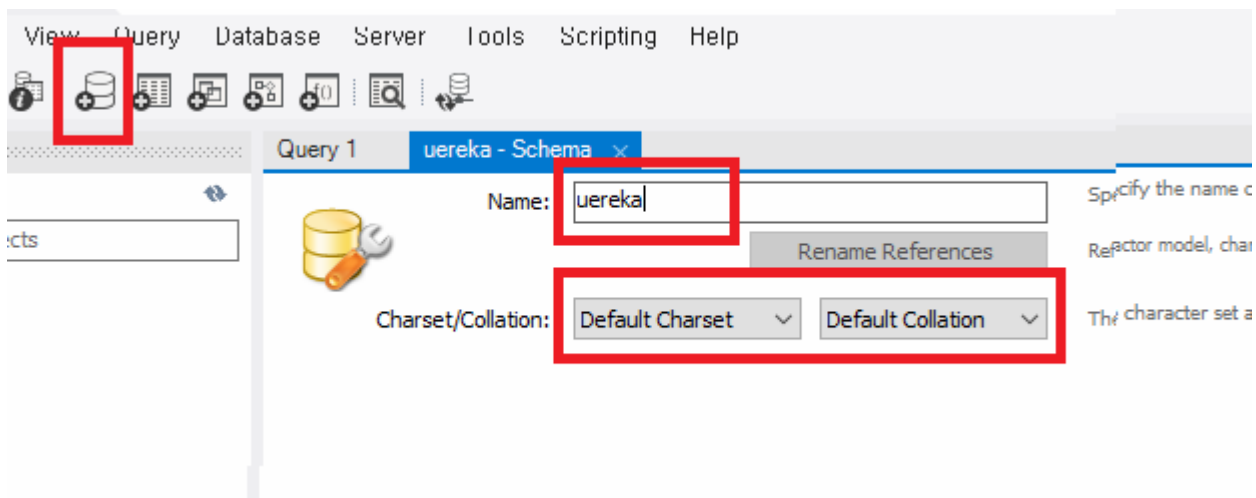
처음에는 기본적인 디비 스키마가 다음과 같이 있다.



새로운 디비 스키마 생성

원통 모형(create new schema)를 클릭하면 오른쪽 화면이 나온다.

스키마 이름만 입력하고 charset은 기본(utfmp4)을 설정해야 한글과 이모지도 깨지지 않고 저장할 수 있다.



Review SQL Script

Apply SQL Script

Review the SQL Script to be Applied on the Database

Online DDL

Algorithm:

Default



Lock Type:

Default



```
1 CREATE SCHEMA `uereka` ;  
2
```



Back

Apply

Cancel

Review SQL Script

Apply SQL Script

Applying SQL script to the database

The following tasks will now be executed. Please monitor the execution.
Press Show Logs to see the execution logs.

☒ Execute SQL Statements

SQL script was successfully applied to the database.

Show Logs

Back

Finish

Cancel

새로운 연결

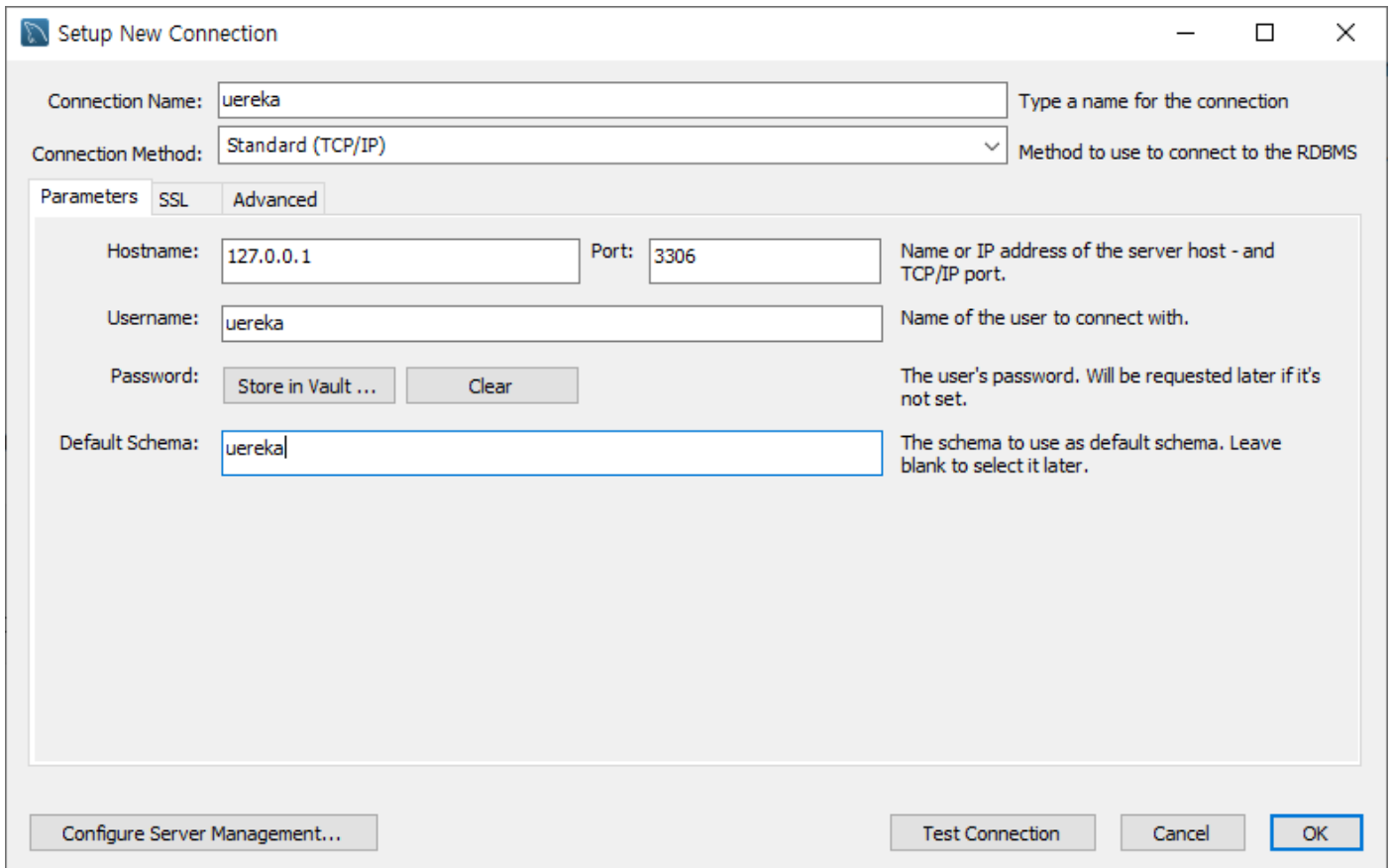


Home 화면에서 + 버튼을 클릭한다.

MySQL Connections

Connection Name은 새로운 연결에 대한 이름이므로 보통 계정명을 많이 기입한다.

Username에 접속할 계정명을 password의 Store in Vault...에 계정의 비밀번호를 default Schema에 미리 open할 스키마명 넣고 Test connection 버튼을 클릭해 연결이 잘 되는지 테스트 후 OK 버튼을 클릭한다.



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.

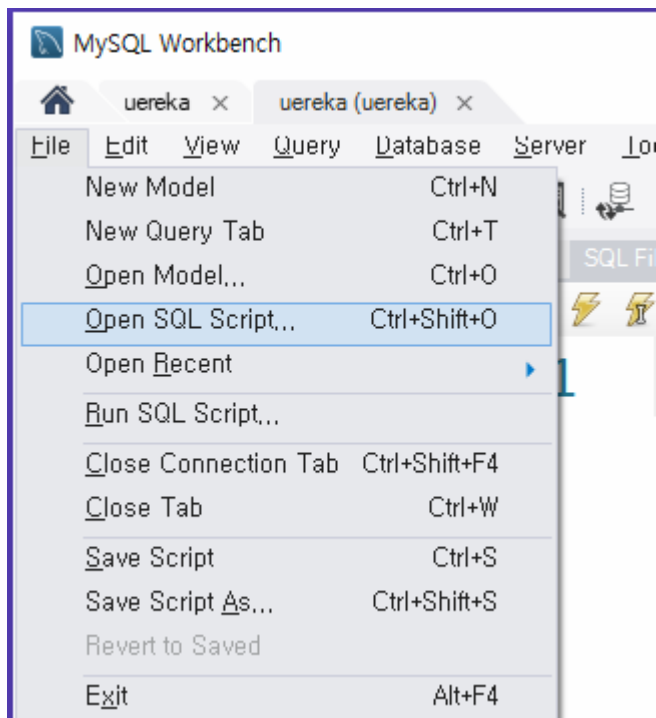
Username: Name of the user to connect with.

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.

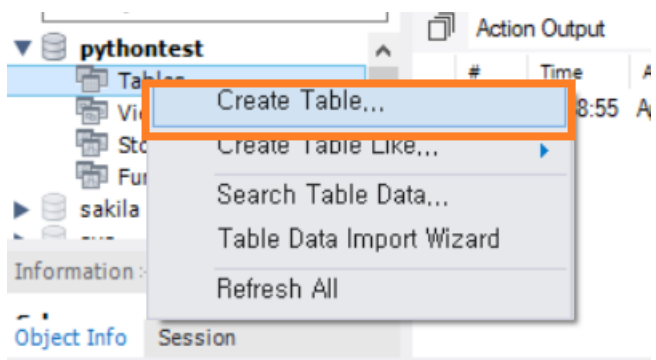
미리 작성된 sql 을 open

메뉴 File > Open Sql Script 를 선택해서 원하는 sql 을 선택한다.



테이블 생성

스키마를 클릭 => Tables를 오른쪽 마우스로 클릭 => Create Table 선택



Query 1

pythontest - Schema

employee - Table




Table Name:




Schema: **pythontest**

Charset/Collation:

utf8utf8_bin

Engine: InnoDB

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	C	Default/Expression
 no	VARCHAR(10)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 name	VARCHAR(45)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
 salary	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Column Name:

CharSet/Collation:

Default CharsetDefault Collation

Comments:

Data Type:

Default:

Storage:

☐ Virtual☐ Stored

☐ Primary Key☒ Not Null☐ Unique

☐ Binary☐ Unsigned☐ Zero Fill

☐ Auto Increment☐ Generated

Columns

Indexes

Foreign Keys

Triggers

Partitioning

Options

Apply

Revert