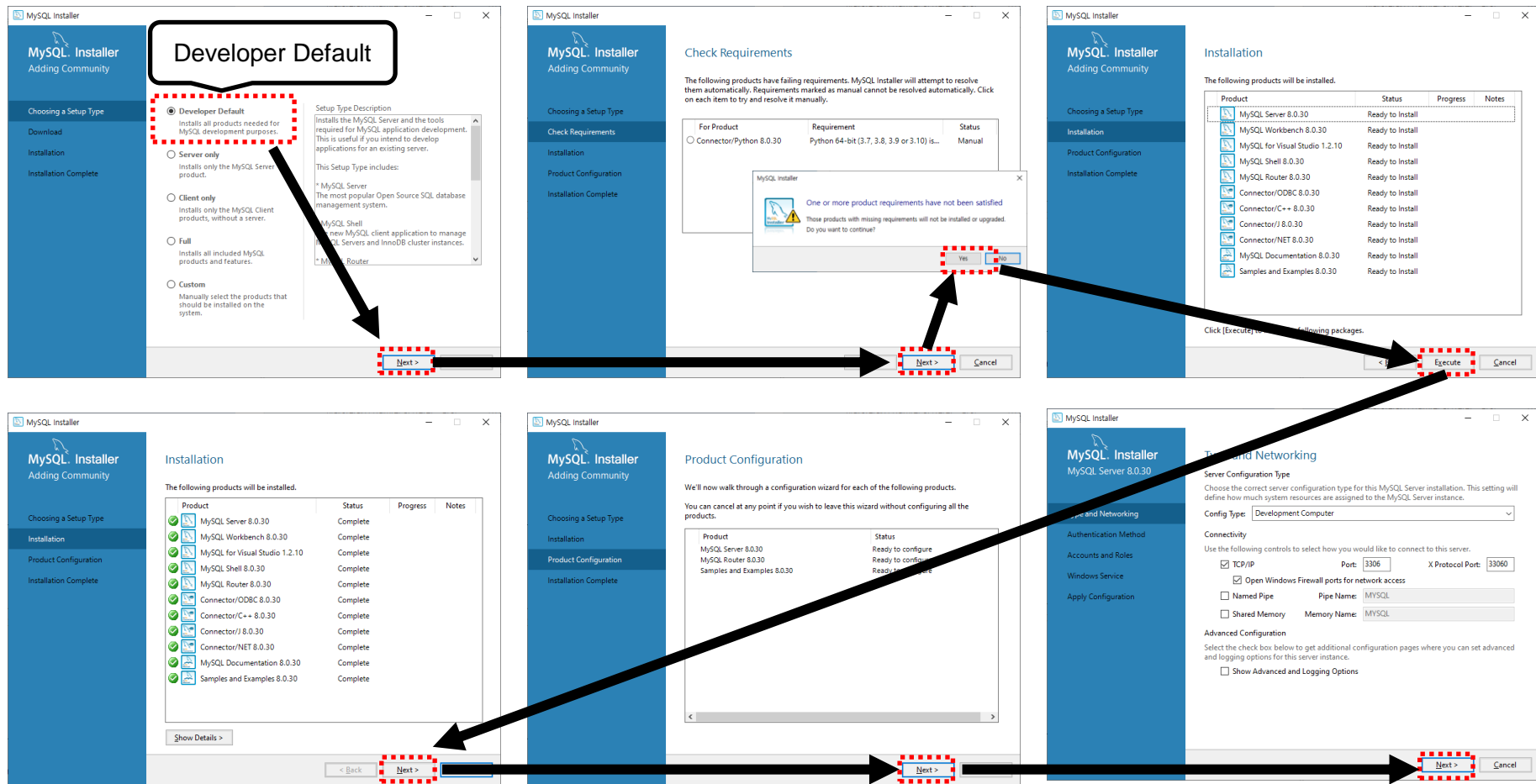


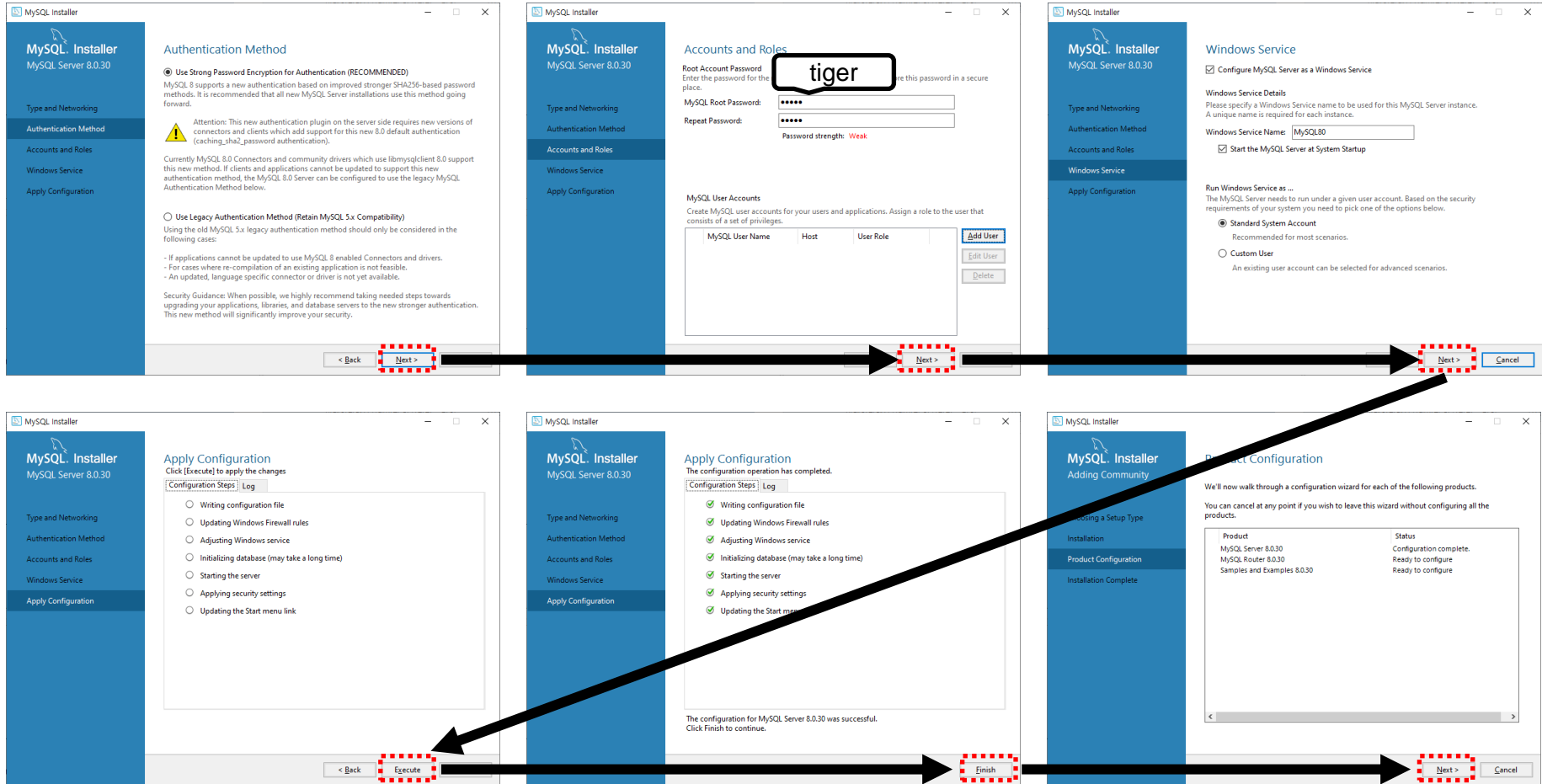
MySQL 설치

1. 웹 브라우저를 열어 MySQL 홈페이지에 접속 <https://www.mysql.com>
2. 상단 메뉴에서 [Downloads]를 클릭
3. 화면 중앙 [MySQL Community (GPL) Downloads >>]를 클릭
4. [MySQL Community Server]를 클릭
5. 화면 중앙 [MySQL Installer for Windows]를 클릭
6. [mysql-installer-web-community-8.0.30.0.msi]를 Download
7. 화면 하단 [No thanks, just start my download]를 클릭
8. 다운받은 파일을 실행해서 설치 시작

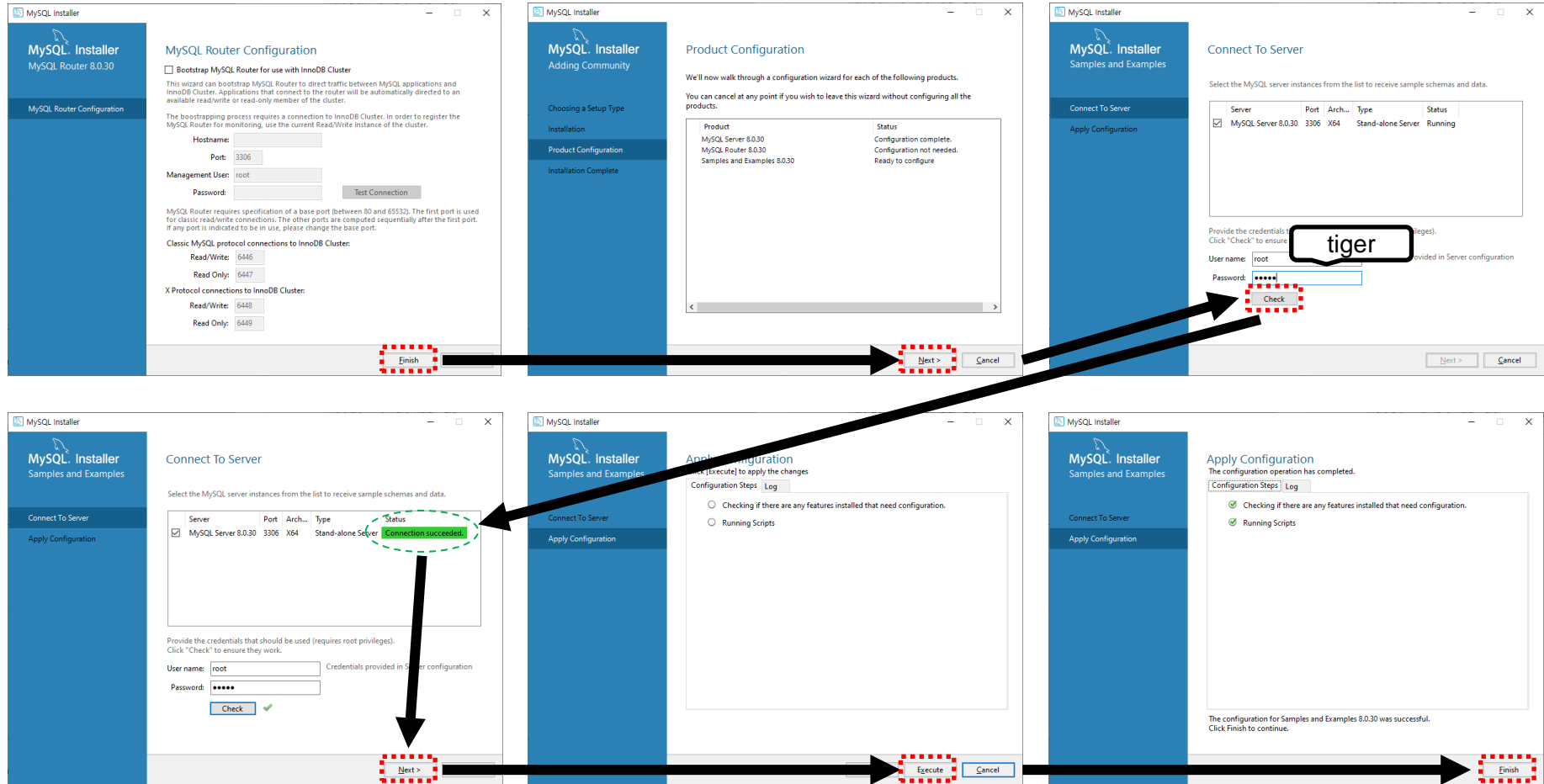
MySQL 설치



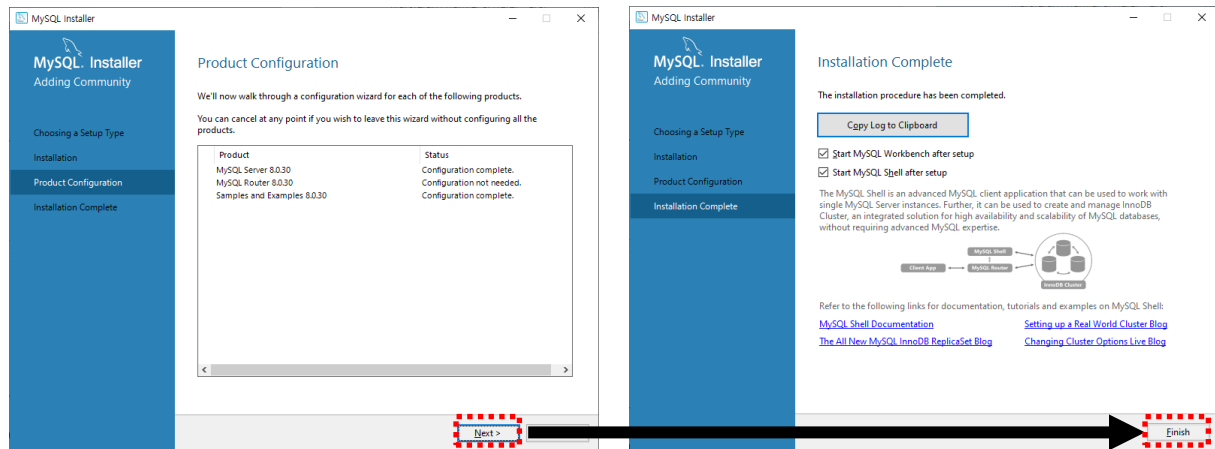
MySQL 설치



MySQL 설치

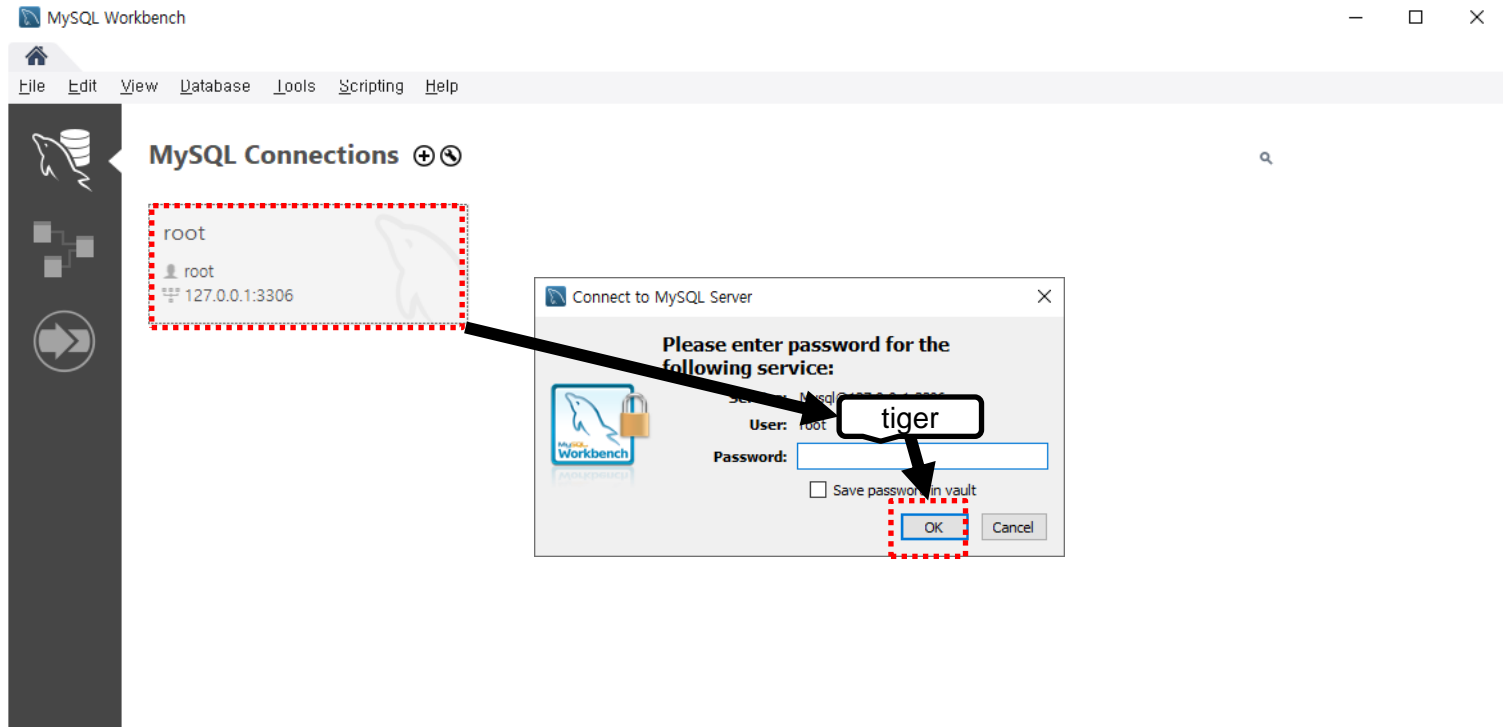


MySQL 설치



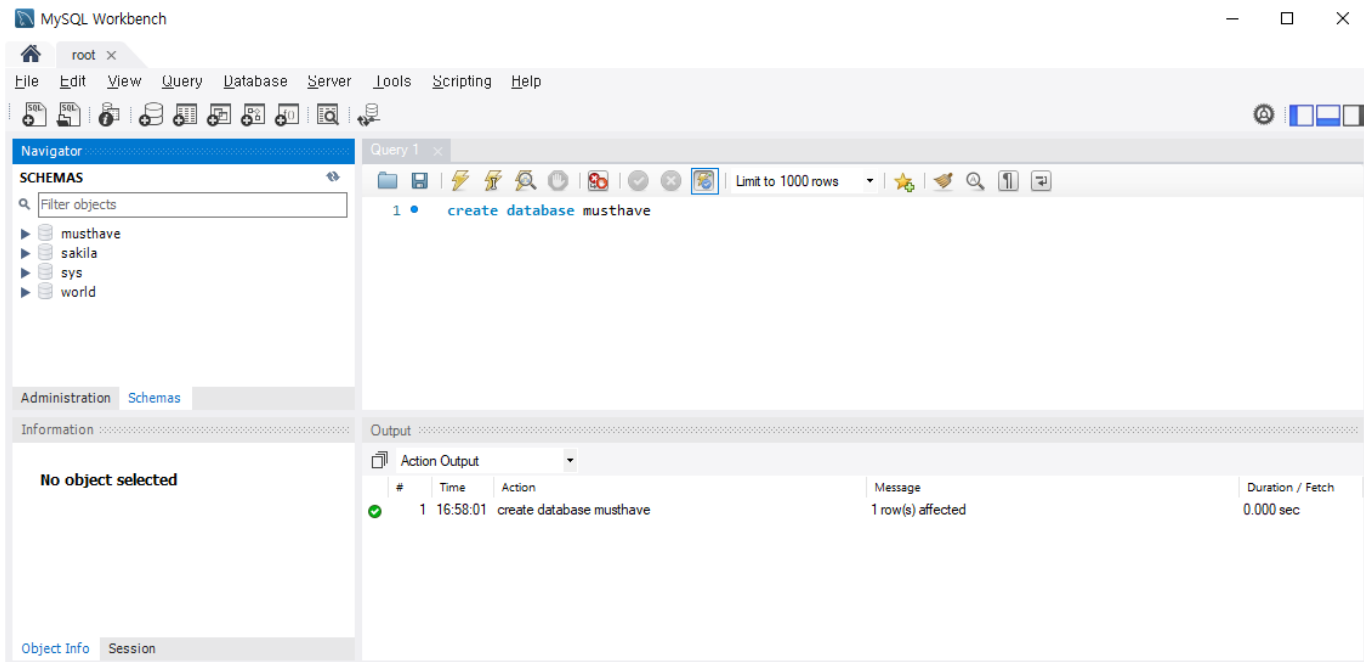
데이터베이스 생성

- 시작 메뉴에서 [MySQL] - [MySQL Workbench 8.0 CE]를 실행



데이터베이스 생성

- 화면 중앙 [Query1 Tab] create database musthave;
- 메뉴 [Query] - [Execute Current Statement] or [Ctrl+Enter]
- [Navigator] - [SCHEMAS Tab] 에서 마우스 오른쪽 클릭 후 [Refresh All]



사용자 계정 생성 및 권한 설정

- [Navigator] - [Administration Tab] - [Users and Privileges]

The process involves three main steps:

- User List:** A table showing existing users and their host information. The 'Add Account' button is highlighted.
- User Creation Form:** A form to create a new user. The 'Login' tab is selected. The 'Login Name' is 'musthave' and the 'Password' is 'tiger'. A text box below the form confirms these details.
- Schema Privileges:** The 'Schema Privileges' tab is selected. The 'Add Entry...' button is highlighted to define privileges for the new user.

User List Table:

User	From Host
mysql.infoschema	localhost
mysql.session	localhost
mysql.sys	localhost
root	localhost

User Creation Form Fields:

- Login Name: musthave
- Authentication Type: Standard
- Limit to Hosts Matching: %
- Password: ***** (Weak password.)
- Confirm Password: *****

Schema Privileges Tab:

- Schema: (Empty list)
- Privileges: (Empty list)
- Buttons: Revoke All Privileges, Delete Entry, Add Entry...

New Schema Privilege Definition Dialog:

- Schema: Selected schema: musthave
- Buttons: Cancel, OK

사용자 계정 생성 및 권한 설정

Login Account Limits Administrative Roles Schema Privileges

Schema	Privileges
musthave	none

Schema and Host fields may use % and _ wildcards.
The server will match specific entries before wildcarded ones.

The user 'newuser'@'%' will have the following access rights on the schema 'musthave':

Object Rights

- ☐ SELECT
- ☐ INSERT
- ☐ UPDATE
- ☐ DELETE
- ☐ EXECUTE
- ☐ SHOW VIEW

DDL Rights

- ☐ CREATE
- ☐ ALTER
- ☐ REFERENCES
- ☐ INDEX
- ☐ CREATE VIEW
- ☐ CREATE ROUTINE
- ☐ ALTER ROUTINE
- ☐ EVENT
- ☐ DROP
- ☐ TRIGGER

Other Rights

- ☐ GRANT OPTION
- ☐ CREATE TEMPORARY TABLES
- ☐ LOCK TABLES

Revoke All Privileges Delete Entry Add Entry...

Unselect All Select "ALL"

Revert Apply

Object Rights

- ☒ SELECT
- ☒ INSERT
- ☒ UPDATE
- ☒ DELETE
- ☒ EXECUTE
- ☒ SHOW VIEW

DDL Rights

- ☒ CREATE
- ☒ ALTER
- ☒ REFERENCES
- ☒ INDEX
- ☒ CREATE VIEW
- ☒ CREATE ROUTINE
- ☒ ALTER ROUTINE
- ☒ EVENT
- ☒ DROP
- ☒ TRIGGER

Other Rights

- ☐ GRANT OPTION
- ☒ CREATE TEMPORARY TABLES
- ☒ LOCK TABLES

Unselect All Select "ALL"

Revert Apply

User Accounts

User	From Host
musthave	%
mysql.infoschema	localhost
mysql.session	localhost
mysql.sys	localhost
root	localhost

JDBC Query 실습

- DataBase : **world**
- Table : **country, countrylanguage**
- Query
 1. 'English'를 사용하고 있는 나라의 수를 출력하세요.
 2. 대한민국이 사용하고 있는 언어를 출력하세요.
 3. 'English'를 공식언어(IsOfficial)로 사용하고 있는 나라의 대륙과 이름을 출력하세요.
 4. 'English'를 사용하는 나라의 수를 대륙별로 출력하세요.

H2Database 설치 및 실행

1. 웹 브라우저를 열어 H2Database 홈페이지에 접속 <https://www.h2database.com>
2. 화면 중앙 [Windows Installer]를 Download
3. 다운받은 파일을 실행해서 설치 시작
4. [시작메뉴] – [H2] – [H2 Console] 실행

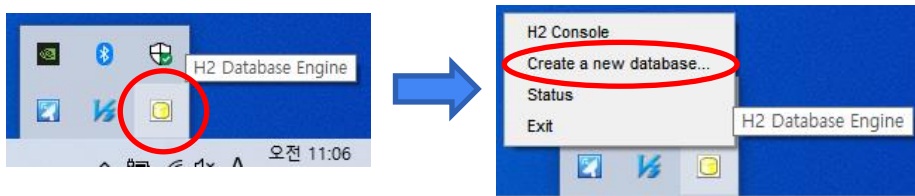


The screenshot shows the '로그인' (Login) window of the H2 Database console. It contains the following fields and controls:

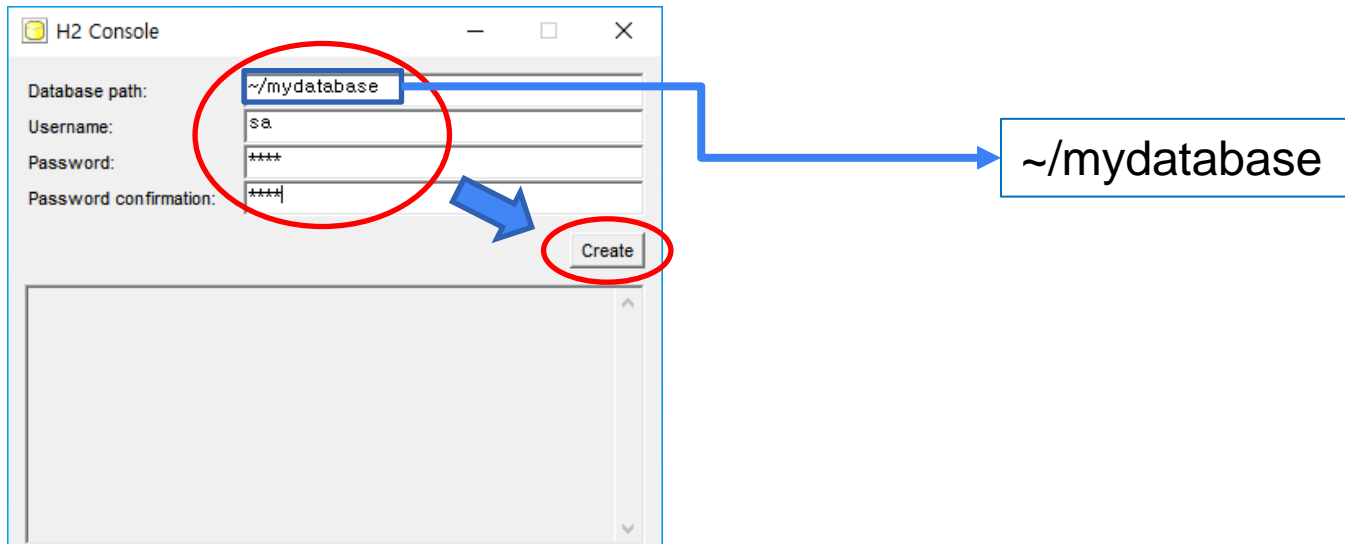
- 저장한 설정:** A dropdown menu currently showing 'Generic H2 (Server)'.
- 설정 이름:** A text input field containing 'Generic H2 (Server)', with '저장' (Save) and '삭제' (Delete) buttons to its right.
- 드라이버 클래스:** A text input field containing 'org.h2.Driver'.
- JDBC URL:** A text input field containing 'jdbc:h2:tcp://localhost/~test'.
- 사용자명:** A text input field containing 'sa'.
- 비밀번호:** An empty text input field.
- At the bottom, there are two buttons: '연결' (Connect) and '연결 시험' (Test Connection).

H2Database 생성 및 설정

1.작업표시줄 트레이 아이콘에서 [H2 Database Engine] 아이콘에서 오른쪽 마우스 클릭



2.Create a new database... 선택 → 본인 DB 명을 아래와 같이 입력



H2Database 생성 및 설정

1. 로그인 다이얼로그 실행
2. [JDBC URL:] 을 오른쪽 그림처럼 입력
 - musthave는 예제 이름임.
 - 본인 DB이름으로 변경
3. 설정 이름 제일 뒤에 DB명 추가
4. 설정 이름 저장

A screenshot of the H2 Database login dialog box. The dialog has a blue title bar with the text '로그인'. It contains several fields and buttons. The '저장한 설정:' field has a dropdown menu showing 'Generic H2 (Server) MustHave'. The '설정 이름:' field has a text box containing 'Generic H2 (Server) MustHave'. The '드라이버 클래스:' field has a text box containing 'org.h2.Driver'. The 'JDBC URL:' field has a text box containing 'jdbc:h2:tcp://localhost/~:/musthave'. The '사용자명:' field has a text box containing 'sa'. The '비밀번호:' field is empty. There are two buttons at the bottom: '연결' and '연결 시험'. Red circles and numbers are used to highlight specific parts: a red circle around the 'JDBC URL' field with a '1' in a black box; a red circle around the '설정 이름' field with a '2' in a black box; and a red circle around the '저장' button with a '3' in a black box.