

# 231005(목)

자바스프링

2023/10/05 16:13

<http://blog.naver.com/sophia2164/223228931846>

01012341234 (휴대폰번호, 주민번호 등) 은 숫자일까? 문자일까?

>> 사칙연산 안하는 것은 '숫자'가 아니라 '문자'

'123번' = 숫자+문자=문자

\*자료

-수치 자료

-문자 자료

\*수치

-정수

-실수 (소수점 등)

컴퓨터는 '실수'로 처리로 함 ('0'과 '1'을 정수로 받지만)

<https://deramgogi123.tistory.com/2>

$2 = 2$

메모리 단위, 자료형, 같은 값이라도 다르게 받아들여 질수가 있다!

메모리 단위 8 bit = 1 byte ☆메모리의 최소 단위는 바이트(byte)이다. 1024 byte = 1 KB 1024 kb = 1 MB 1024 mb =

1 GB 1024 gb = 1 TB 자료형 \*정수형 자료형명칭 메모리 크기(byte) char 1 short 2 int 4 long 4 long long 8 \*실수

형 자료형명칭메모리 크기(byte) float 4 double 8 ★같은 값이라도 다르게 받아들여 질수가 있다. 1byte = 8bit 1bit는

0,1 두 가지로 쓰여진다. 1 byte는  $2^8$  가지 = 256가지를 표현할 수...

[deramgogi123.tistory.com](https://deramgogi123.tistory.com)

<https://nextmoveon.tistory.com/280>

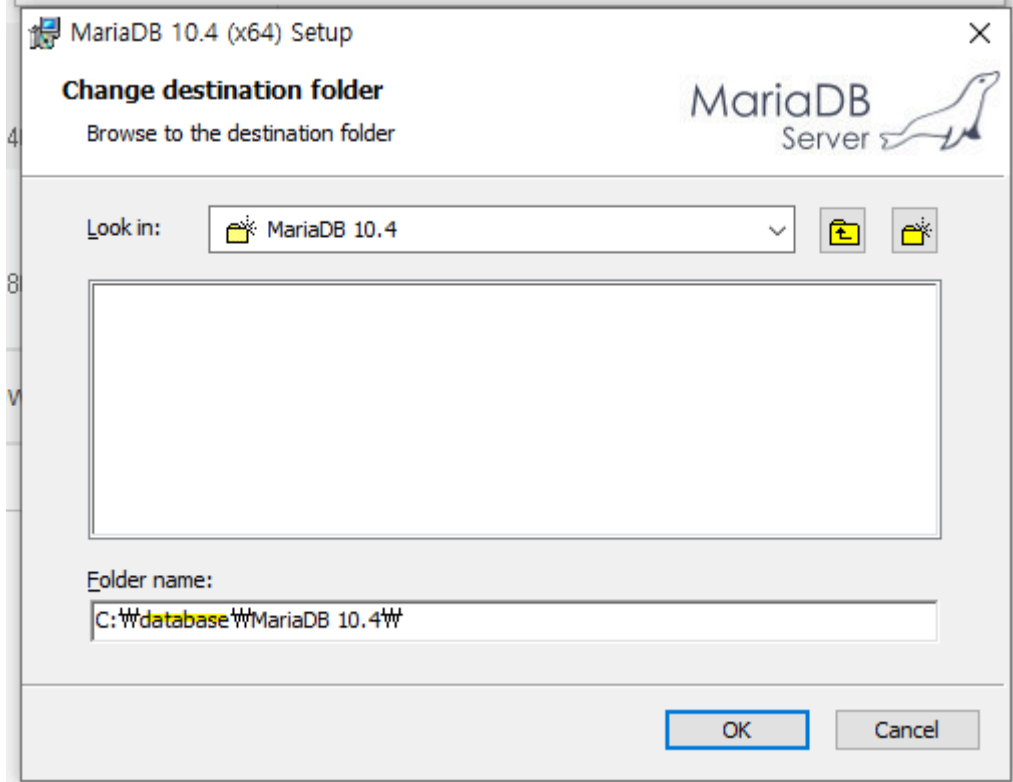
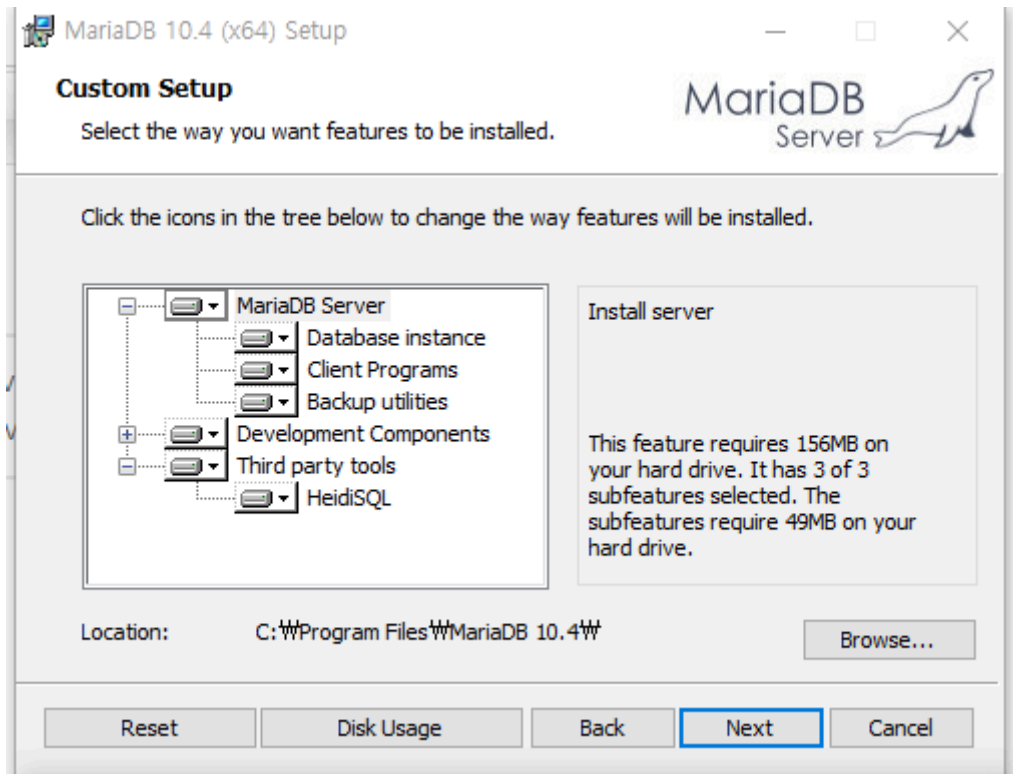


#### [SQL] 레코드(Recode) vs 튜플(Tuple) vs 행(Row) 차이

차이는 없다. 모두 같은 뜻이지만, 어디에서 부르느냐에 따라 차이가 난다. 파일 시스템 데이터베이스 모델링 관계형 데이터베이스 파일(File) 엔터티(Entity) 테이블(Table) 레코드(Recode) 튜플(Tuple) 행(Row) 키(Key) 유일값(Identifier) 기본키(Primary Key), Unique 필드(Field) 어트리뷰트(Attribute) 컬럼(Column)

[nextmoveon.tistory.com](https://nextmoveon.tistory.com)

\* 마리아DB 설치



User settings

Default instance properties  
MariaDB 10.4 (x64) database configuration

MariaDB Server

☒ **Modify password for database user 'root'**

New root password:  Enter new root password

Confirm:  Retype the password

☐ **Enable access from remote machines for 'root' user**

☒ **Use UTF8 as default server's character set**

한글 깨지지 않도록 체크하기

Back Next Cancel

Database settings

Default instance properties  
MariaDB 10.4 (x64) database configuration

MariaDB Server

☒ **Install as service**

Service Name:

☒ **Enable networking**

TCP port:  '마리아DB'와 'MySQL' 포트는 다르게 배정되어야 함

**InnoDB engine settings** DB 여러 개 사용할 때에는 다른 포트번호로 배정

Buffer pool size:  MB

Page size:  KB

Back Next Cancel

데이터베이스 파일들은 DB폴더에 몰아서 넣을 예정.

포트 인덱스 테이블

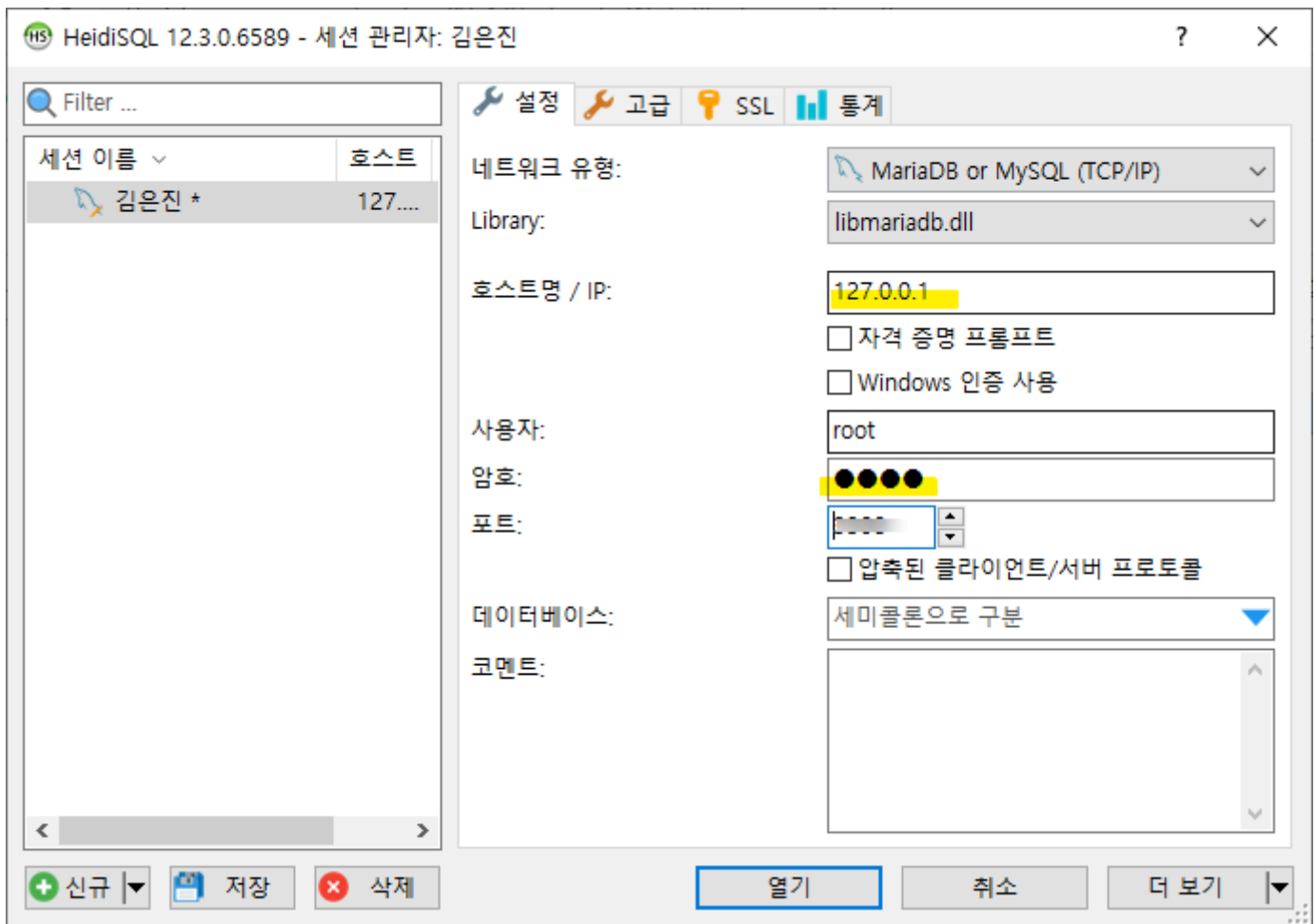
HTTP 포트용 : 80 포트

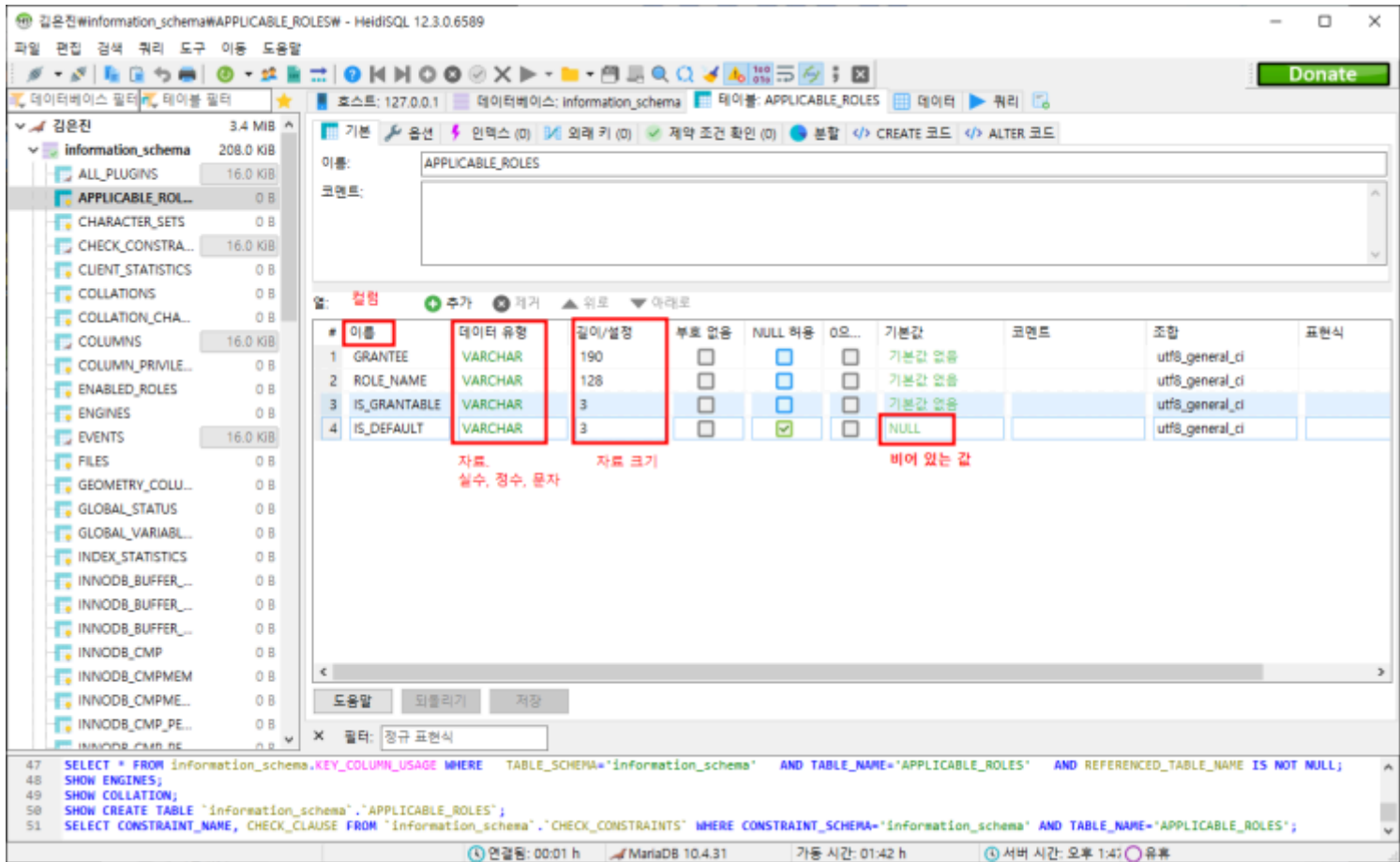
개발자는 내가 필요한 자료를 잘 찾아야 한다.  
(다음/네이버는 너무 상업적이라 잘 신뢰하지 않음. 구글이 그나마 낫다)

작업관리자-세부정보-PID(TCP포트번호 확인가능)

\*mySQL설치

HeidiSQL 실행





Local host (내 컴퓨터) = 127.0.0.1

NULL 값 : '빈 값'. NULL ≠ 0

자료크기 : 길이 0~999

Setting environment for MariaDB 10.4 (x64)

C:\Windows\System32>mysql -u root -p

Enter password: \*\*\*\*

Welcome to the MariaDB monitor. Commands end with ; or \g.

Your MariaDB connection id is 12

Server version: 10.4.31-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MariaDB [(none)]> show database

-> ;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'database' at line 1

MariaDB [(none)]> show database;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'database' at line 1

MariaDB [(none)]> show databases;

Database
information_schema
mysql
performance_schema
test

4 rows in set (0.001 sec)

MariaDB [(none)]> show schemas;

Database
information_schema
mysql
performance_schema
test

4 rows in set (0.001 sec)

MariaDB [(none)]>

Setting environment for MariaDB 10.4 (x64)

C:\Windows\system32>-u mysql root -p  
'-u'은(는) 내부 또는 외부 명령, 실행할 수 있는 프로그램, 또는  
배치 파일이 아닙니다.

C:\Windows\system32>mysql -u root -p  
Enter password: \*\*\*\*  
Welcome to the MariaDB monitor. Commands end with ; or \g.  
Your MariaDB connection id is 11  
Server version: 10.4.31-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MariaDB [(none)]> show databases

-> show databases;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'show databases' at line 2

MariaDB [(none)]> show databases;

Database
information_schema
mysql
performance_schema
test

4 rows in set (0.001 sec)

MariaDB [(none)]> show databases

-> show databases;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'show databases' at line 2

MariaDB [(none)]> show databases;

Database
information_schema
mysql
performance_schema
test

4 rows in set (0.001 sec)

MariaDB [(none)]> show databases

-> ;

Database
information_schema
mysql
performance_schema
test

4 rows in set (0.001 sec)

MariaDB [(none)]> show schemas;

Database
information_schema
mysql
performance_schema
test

4 rows in set (0.001 sec)

MariaDB [(none)]> use mysql;

Database changed

MariaDB [mysql]> use test;

Database changed

MariaDB [test]> use mysql



\*\*\* command prompt Maria DB >>> 3306

mariadb -u 유저네임 -p

비밀번호

>> mariadb -u root -p 또는 mysql -u root -p

>> -u root -p

>> 비번 1234

>> show databases; / show schemas;

(MySQL 서버 호스트의 데이터베이스를 나열)

>> use mysql;

Database changed

use [데이터베이스 이름]

사용하고자하는 데이터 베이스 접근>>목록확인 >> 나가기

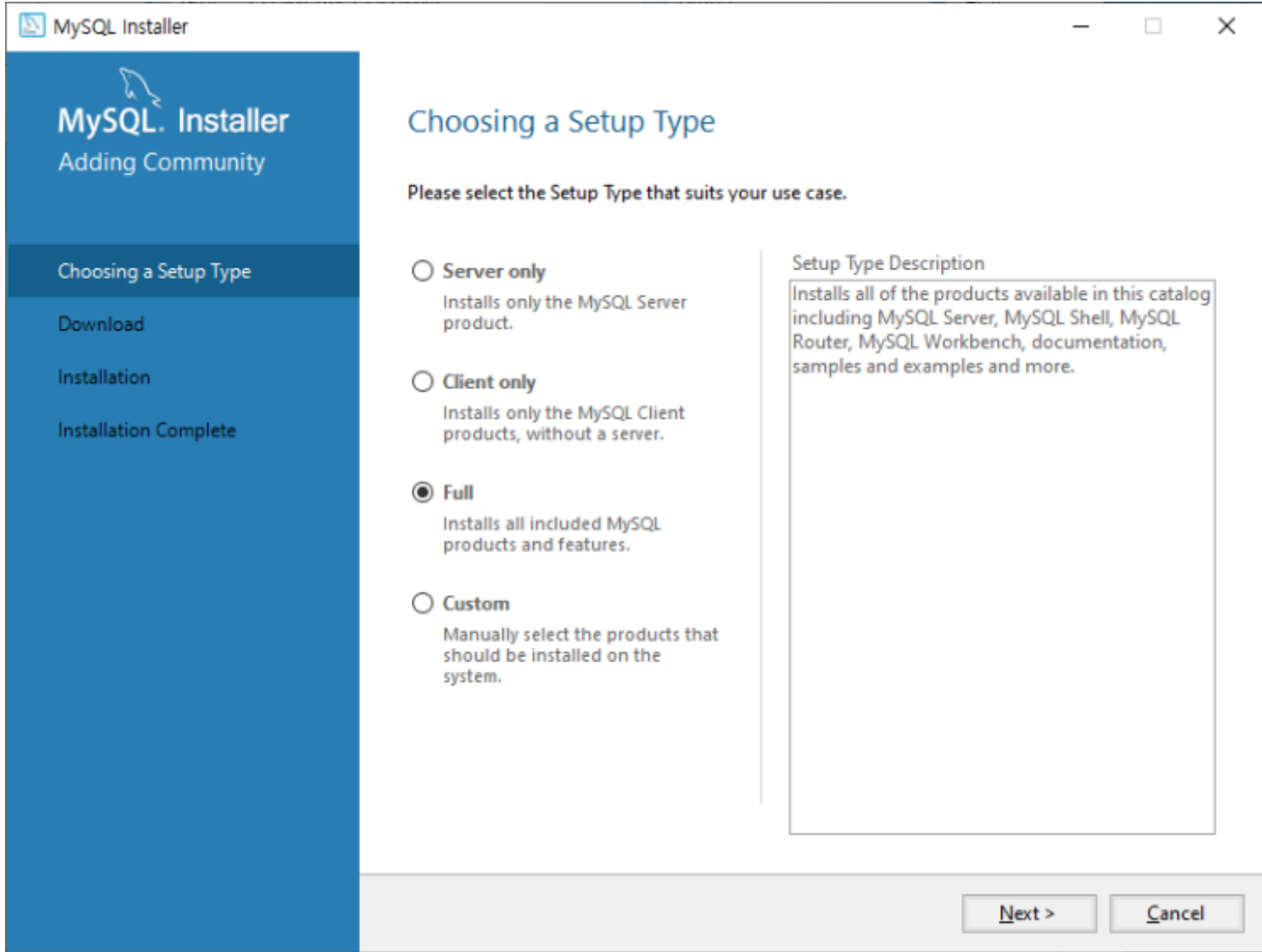
>> use test;

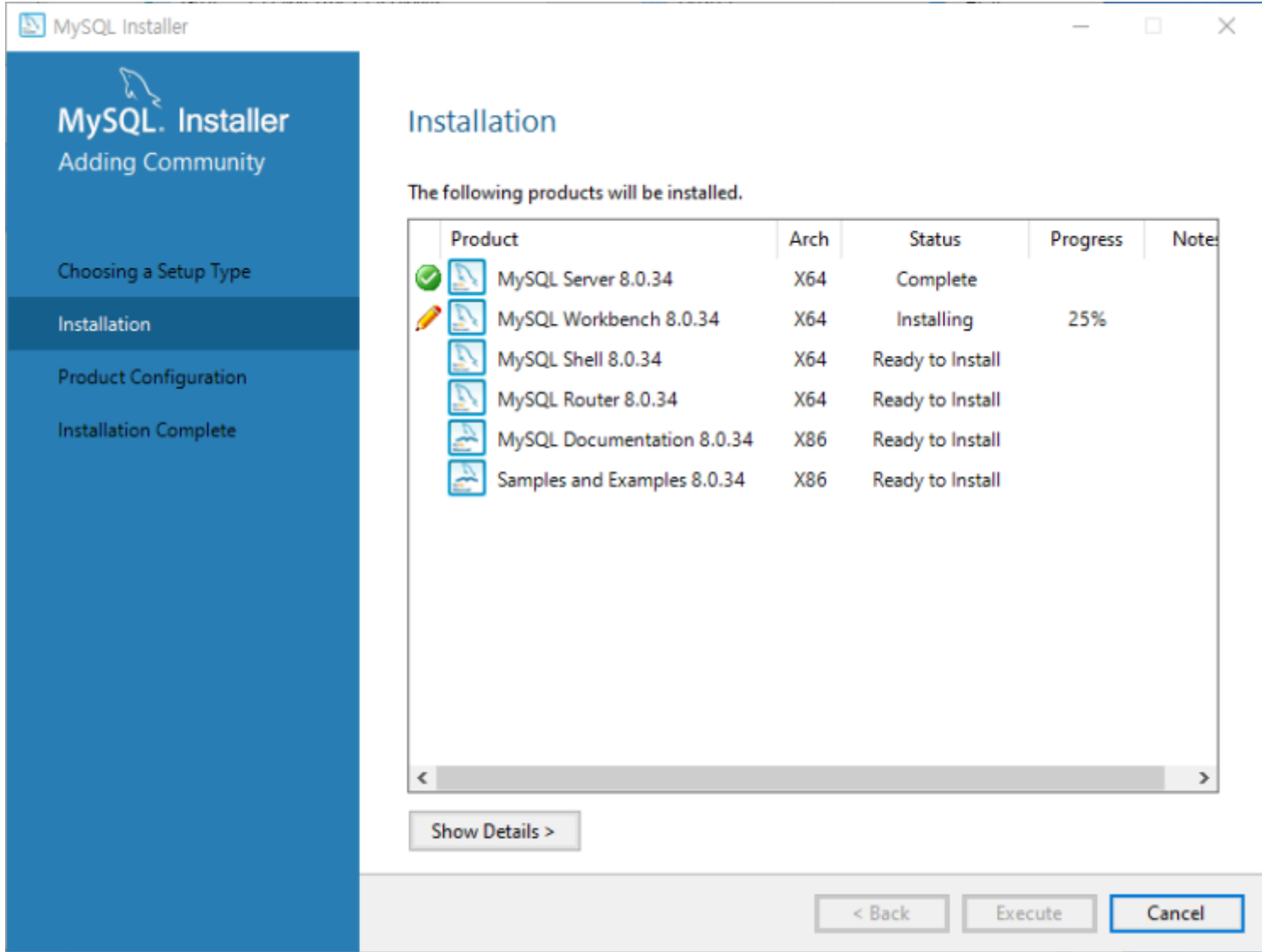
>> use tables; >>내 데이터베이스 목록

>> exit;

---

MY SQL 설치





MySQL Installer

MySQL Server 8.0.34

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: Development Computer

Connectivity

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

☒ TCP/IP

Port: 3307

X Protocol Port: 33070

☒ Open Windows Firewall ports for network access

☐ Named Pipe

Pipe Name: MYSQL

☐ Shared Memory

Memory Name: MYSQL

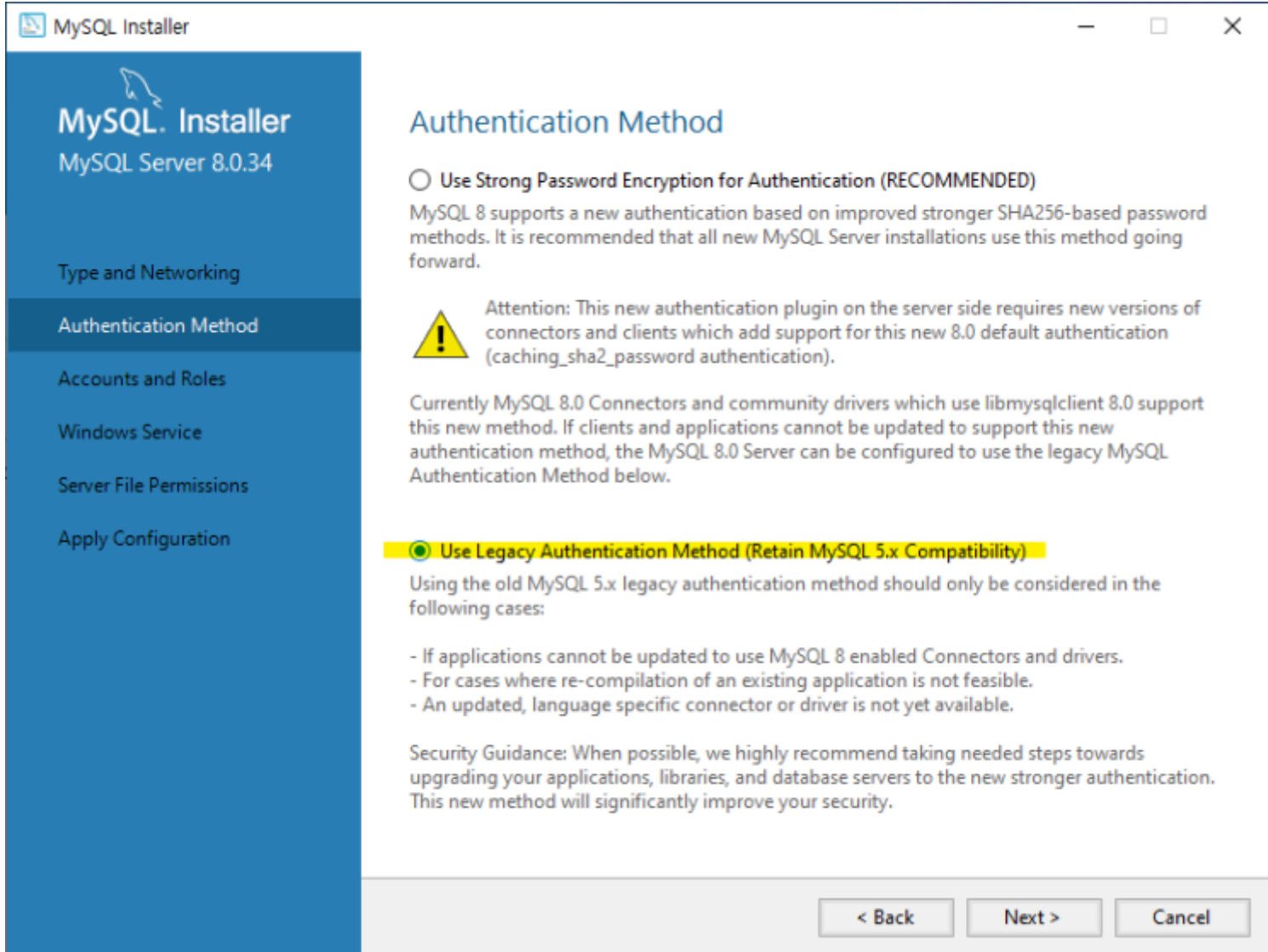
Advanced Configuration

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

Next >

Cancel



MySQL Installer

MySQL Server 8.0.34

Type and Networking

Authentication Method

Accounts and Roles

Windows Service

Server File Permissions

Apply Configuration

## 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

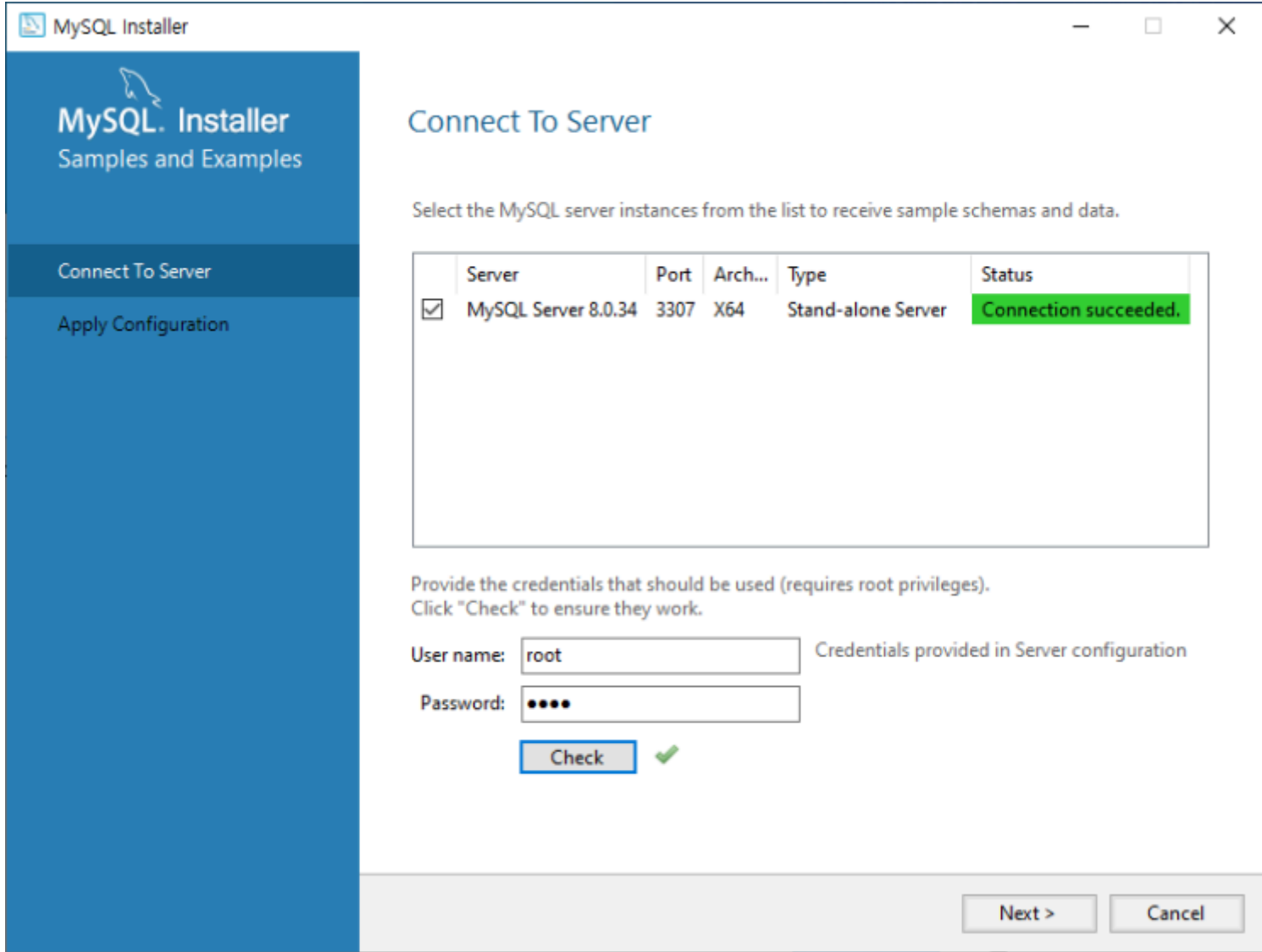
Edit User

Delete

< Back

Next >

Cancel



```
MySQL 8.0 Command Line Client
Enter password: ****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 18
Server version: 8.0.34 MySQL Community Server - GPL

Copyright (c) 2000, 2023, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

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

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sakila |
| sys |
| world |
+-----+
6 rows in set (0.00 sec)

mysql> use world;
Database changed
mysql> exit;
```

\*\*\* MySQL >>> 3307

비번: 1234

>> show databases;

>> use world;

>> exit;

\*MariaDB, MySQL 공통주의사항

| information\_schema |

| mysql |

| performance\_schema |

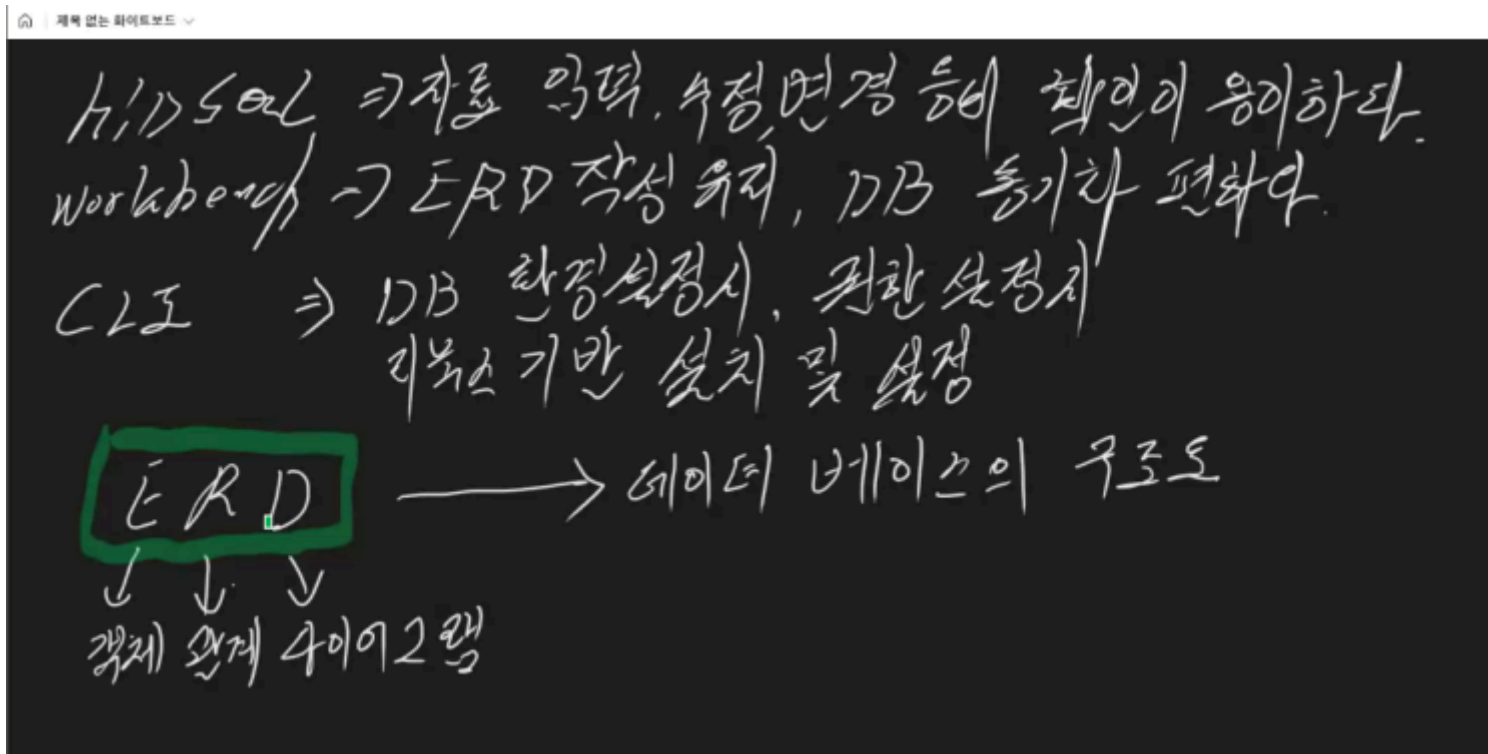
절대 건드리면 안된다. 꼭 필요함

\*\*\* MySQL Workbench 실행 (Heidi SQL하고 같은 것)



하는 방법

1. Heidi SQL : 자료가 입력/수정/변경 등의 순간순간 확인이 워크벤치보다 용이함. 구조를 만들고 값이 들어오는지 아닌지를 확인하기 편함
  2. 명령프롬프트 cli (Command Line Interface)
  3. \*\*MariaDB
  4. MySQL >> 바로 PASSWORD로 넘어간다
  5. \*\*WorkBench >> 하이드 ERD 작성이 유리, DB 동기화가 편함
- CLI : DB 환경 설정, 권한 설정시에 그리고 리눅스 기반 설치 및 설정.
  - ERD(entity-relationship diagram) : 데이터 베이스 구조도



\*엑세스 : 내 컴퓨터 내에서 DB를 저장할 때 많이 씀 (무료)

-금색열쇠: Code Char 기준이 되는 키

-초록색: Name CHAR 외부키 / 실선 - country 바뀌면 종속된 language도 바로 바뀜

-CountryCode / 점선 - 바뀔 수도 안 바뀔 수도 있음