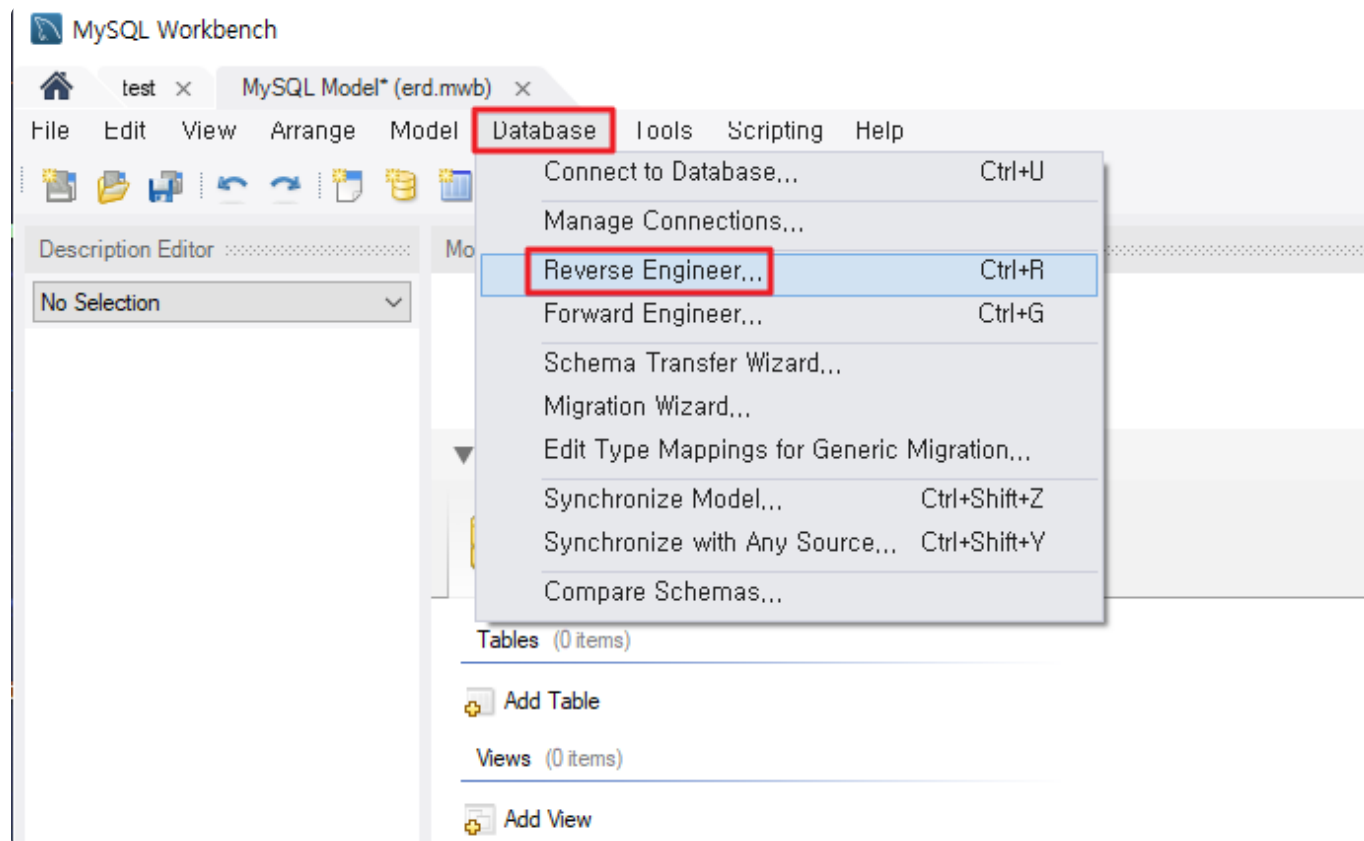
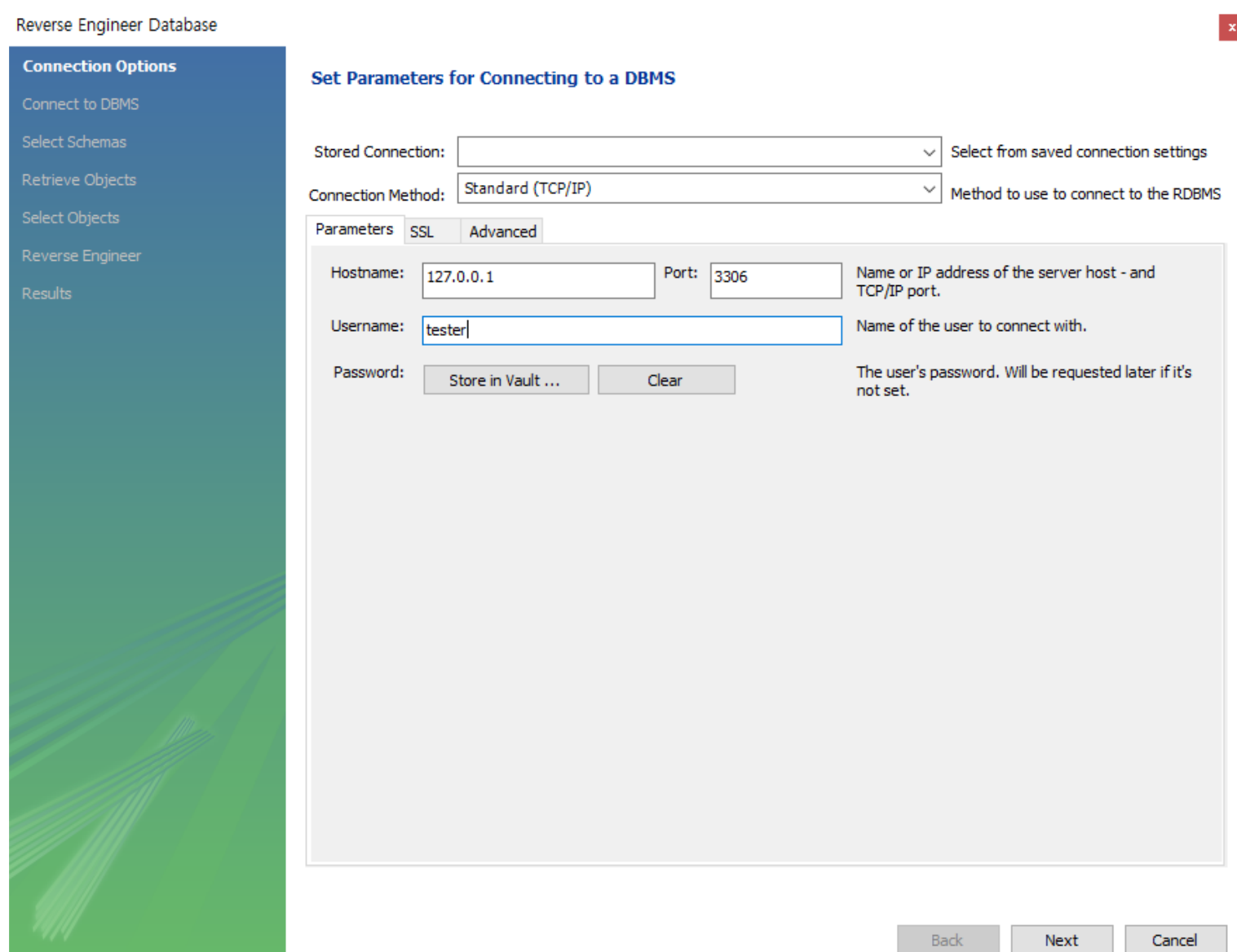


MySQL 워크벤치 ERD 생성

1. 상단 메뉴 탭에서 Database > Reverse Engineer를 선택한다.



2. Hostname, port, username을 입력하고 다음으로 이동한다.



3. ERD로 추출할 DB를 선택 후 다음으로 이동한다.

Reverse Engineer Database

Connection Options

Connect to DBMS

Select Schemas

Retrieve Objects

Select Objects

Reverse Engineer

Results

Select Schemas to Reverse Engineer

Select the schemas you want to include:

☐ local_batch

☐ local_db

☒ local_erd

☐ local_hibernate

☐ local_test

Back

Next

Cancel

4. Retrieval Completed Successfully 메시지가 나타났으면 다음으로 이동한다.

Reverse Engineer Database

Connection Options

Connect to DBMS

Select Schemas

Retrieve Objects

Select Objects

Reverse Engineer

Results

Retrieve and Reverse Engineer Schema Objects

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

☒ Retrieve Objects from Selected Schemas

☒ Check Results

Retrieval Completed Successfully

Finished.

Show Logs

Back


Next

Cancel

5. Show Filter 버튼을 눌러서 제외할 테이블을 선택한다. (왼쪽이 선택, 오른쪽이 제외이다.)

- Connection Options
- Connect to DBMS
- Select Schemas
- Retrieve Objects
- Select Objects
- Reverse Engineer
- Results

Select Objects to Reverse Engineer



☒ Import MySQL Table Objects

Hide Filter

5 Total Objects, 5 Selected

local_erd.member

local_erd.member_access_log

local_erd.student

local_erd.student_subject

local_erd.subject

>

<

>>

<<

+

Use the + button to exclude objects matching wildcards such as * and ?

☒ Place imported objects on a diagram

BackExecute >Cancel

- Connection Options
- Connect to DBMS
- Select Schemas
- Retrieve Objects
- Select Objects
- Reverse Engineer
- Results

Reverse Engineering Progress

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

- ☒ Reverse Engineer Selected Objects
- ☒ Place Objects on Diagram

Operation Completed Successfully

Show Logs

BackNextCancel



Connection Options

Connect to DBMS

Select Schemas

Retrieve Objects

Select Objects

Reverse Engineer

Results

Reverse Engineering Results

Summary of Reverse Engineered Objects:

- 4 tables from schema 'local_erd'

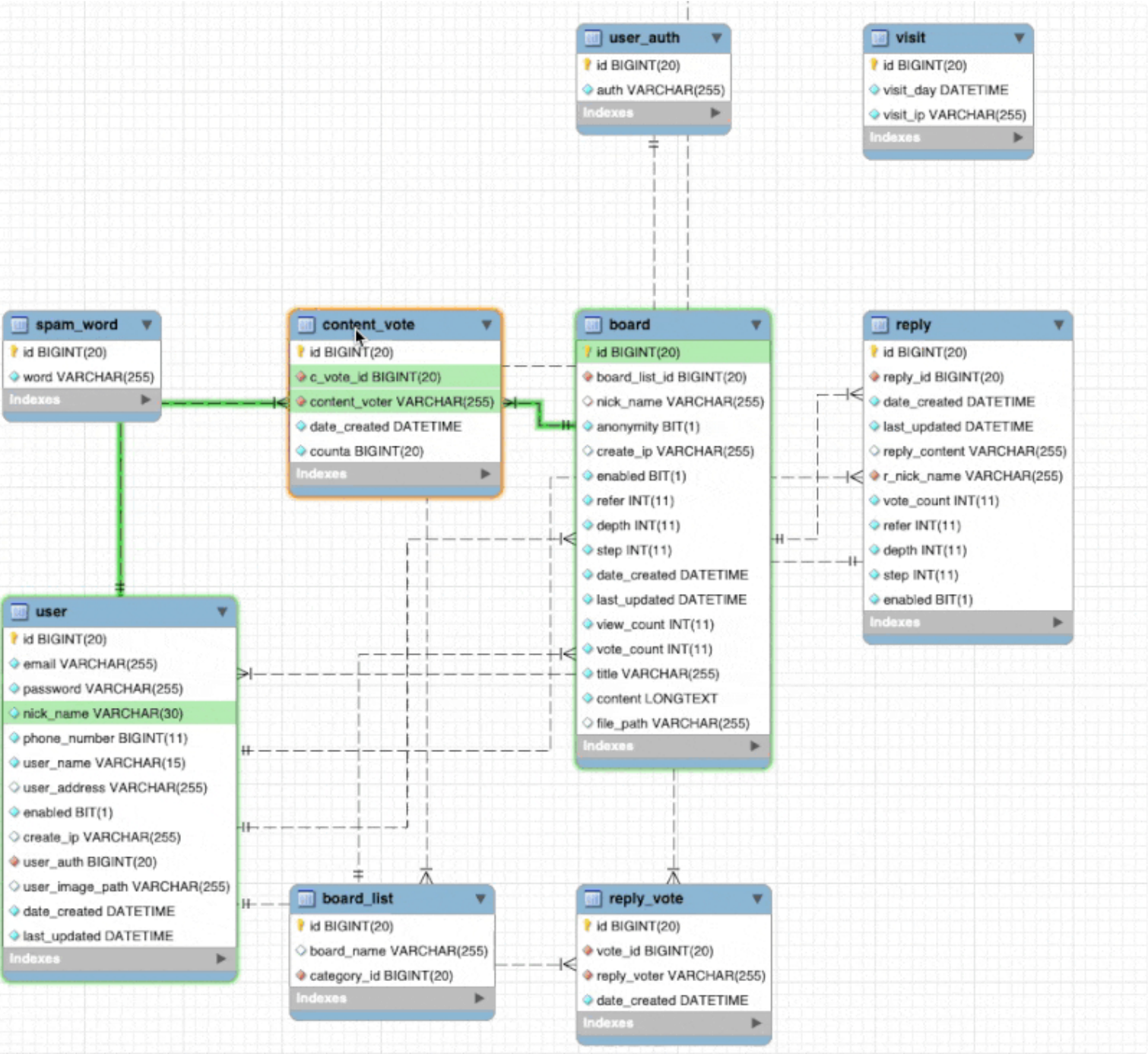
Back

Finish

Cancel

6. ERD 완성 및 배치하기

- ctrl + s로 ERD를 mwb 확장자로 저장할 수 있다.



MySQL 워크벤치 ERD로 쿼리문 추출

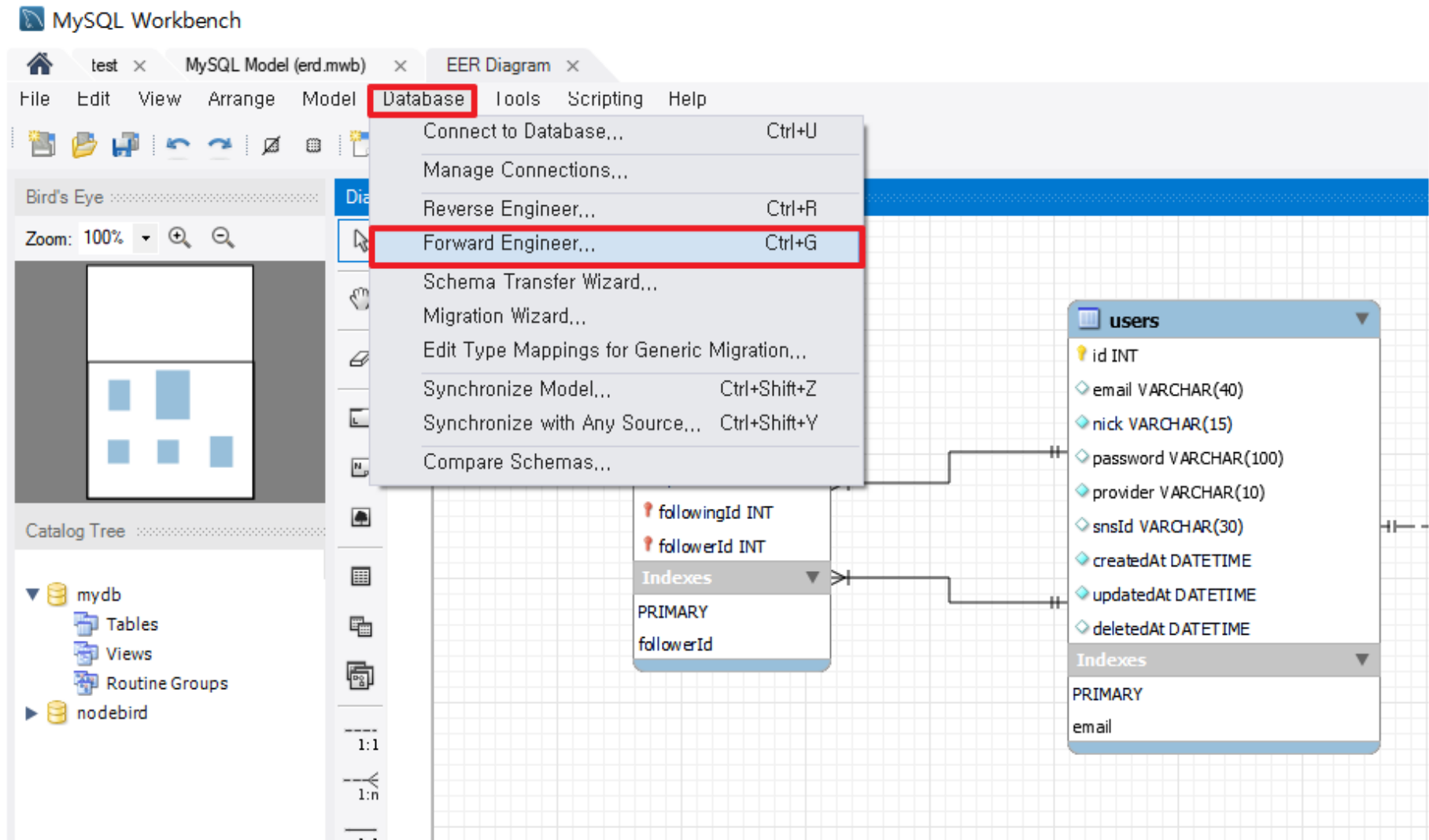
ERD를 만들고 저장하게 된다면 [파일명.mwb](#) 확장명으로 저장된다.

만일 누군가 만든 mwb 파일을 워크벤치에 열어서 SQL 쿼리를 추출하고 싶다면 어떻게 할까?

ERD로 쿼리를 추출하는 방법을 알아보자

1. Database > Forward Engineer 클릭

- 위에서 SQL문을 Reverse Engineer 을 통해 ERD를 만들어줬듯이 거꾸로 Forward Engineer를 선택하면 된다.



2. 데이터베이스 Connection 설정하기

- 연결할 DB를 설정해주는 창이다.
- 만약 로컬에서 DB를 사용하고 있다면 hostname 에 localhost(127.0.0.1) 를 넣으면 된다.
- 이외의 AWS의 RDS 인스턴스에 연결하고 싶다면 알맞는 주소와 유저명, 비번을 넣으면 연결된다.

Forward Engineer to Database

Connection Options

Options

Select Objects

Review SQL Script

Commit Progress

Set Parameters for Connecting to a DBMS

Stored Connection: test

Select from saved connection settings

Connection Method: Standard (TCP/IP)

Method to use to connect to the RDBMS

Parameters

SSL

Advanced

Hostname: 127.0.0.1

Port: 3306

Name or IP address of the server host - and TCP/IP port.

Username: test

Name of the user to connect with.

Password: Store in Vault ...

Clear

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.

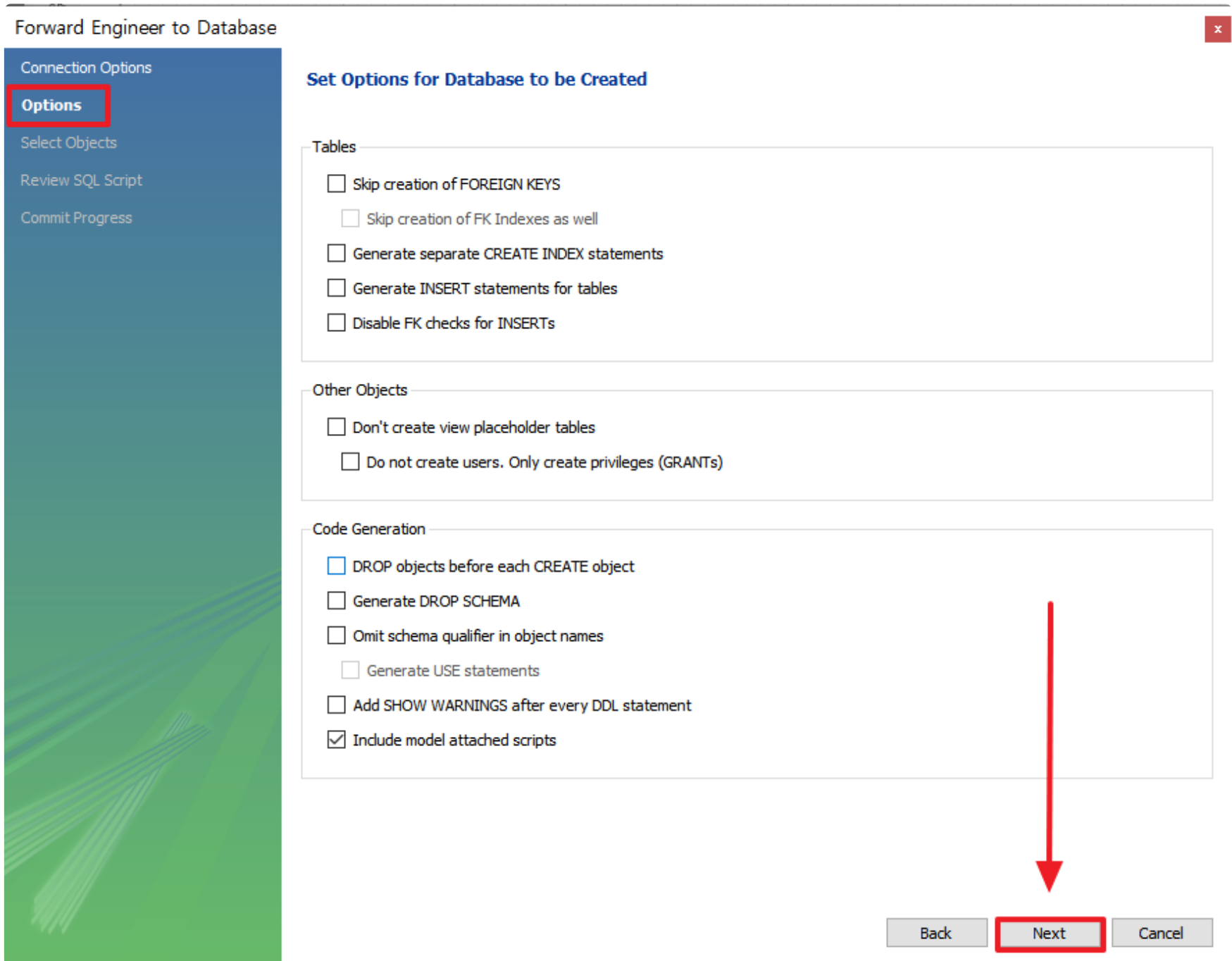
Back

Next

Cancel

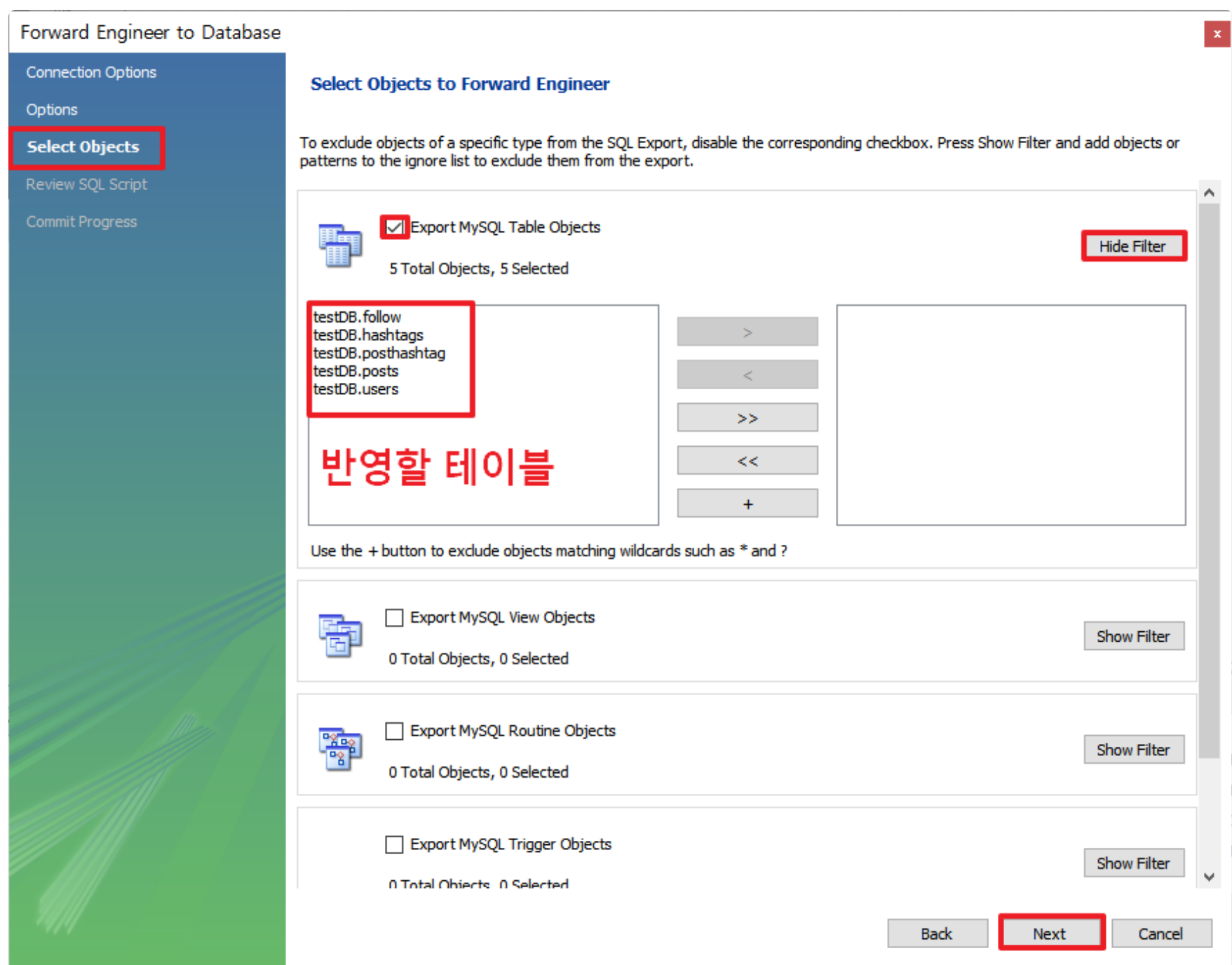
3. 테이블 옵션 설정

- 옵션창이 하나 나오는데, 별다른 설정이 없다면 그대로 Next 버튼을 클릭하면 된다.
- Skip creation of FOREIGN KEYS 를 체크하면 외래키 관계설정을 생략가능하다.



4. 반영할 테이블 선택

- 반영할 데이터베이스 객체를 선택한다.



5. SQL문 추출

- SQL문이 생성되어져 나온다.
- 복사해서 사용해도 되고, 저장해서 나중에 사용해도 된다.
- 바로 워크벤치 스키마에 자동으로 적용할거면 Next 버튼을 누르면 된다.

Connection Options

Options

Select Objects

Review SQL Script

Commit Progress

Review the SQL Script to be Executed

This script will now be executed on the DB server to create your databases.
You may make changes before executing.

```
19
20 -----
21 -- Table `testDB`.`users`
22 -----
23 CREATE TABLE IF NOT EXISTS `testDB`.`users` (
24   `id` INT NOT NULL AUTO_INCREMENT,
25   `email` VARCHAR(40) NULL DEFAULT NULL,
26   `nick` VARCHAR(15) NOT NULL,
27   `password` VARCHAR(100) NULL DEFAULT NULL,
28   `provider` VARCHAR(10) NOT NULL DEFAULT 'local',
29   `snsId` VARCHAR(30) NULL DEFAULT NULL,
30   `createdAt` DATETIME NOT NULL,
31   `updatedAt` DATETIME NOT NULL,
32   `deletedAt` DATETIME NULL DEFAULT NULL,
33   PRIMARY KEY (`id`),
34   UNIQUE INDEX `email` (`email` ASC) VISIBLE)
35 ENGINE = InnoDB
36 DEFAULT CHARACTER SET = utf8mb3;
37
38 -----
39 -- Table `testDB`.`follow`
40 -----
41
42 CREATE TABLE IF NOT EXISTS `testDB`.`follow` (
43   `createdAt` DATETIME NOT NULL,
44   `updatedAt` DATETIME NOT NULL,
45   `followingId` INT NOT NULL,
46   `followerId` INT NOT NULL,
47   PRIMARY KEY (`followingId`, `followerId`),
```

쿼리문들을 그대로 복사해서 사용
해도 되고,

Next버튼을 누르면 자동으로 쿼리를 실행
해 테이블을 바로 생성해준다

Save to File...

Copy to Clipboard

sql 파일로 저장할수도 있다

Back

Next

Cancel

6. Database 생성

Connection Options

Options

Select Objects

Review SQL Script

Commit Progress

Forward Engineering Progress

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

- Connect to DBMS
- Execute Forward Engineered Script
- Read Back Changes Made by Server
- Save Synchronization State

Forward Engineer Finished Successfully

Show Logs

BackCloseCancel

7. 실제 반영되었는지 스케마항목을 확인한다

testdb

- Tables
 - follow
 - hashtags
 - Columns
 - Indexes
 - Foreign Keys
 - Triggers
 - posthashtag
 - posts
 - users
- Views
- Stored Procedures
- Functions

AdministrationSchemas

Information

- Columns:
 - idint AI PK
 - emailvarchar(40)
 - nickvarchar(15)
 - passwordvarchar(100)
 - providervarchar(10)
 - snsIdvarchar(30)
 - createdAtdatetime
 - updatedAtdatetime
 - deletedAtdatetime

Object InfoSession