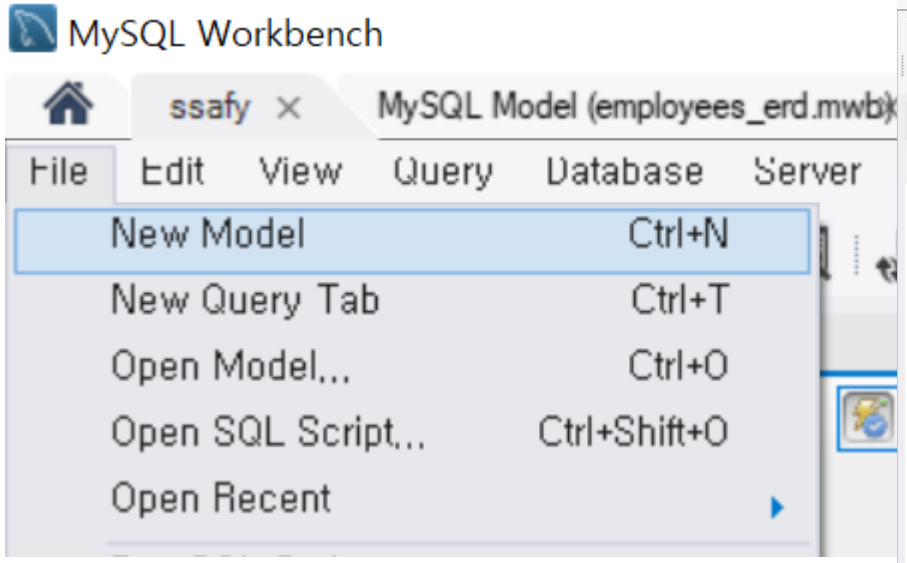
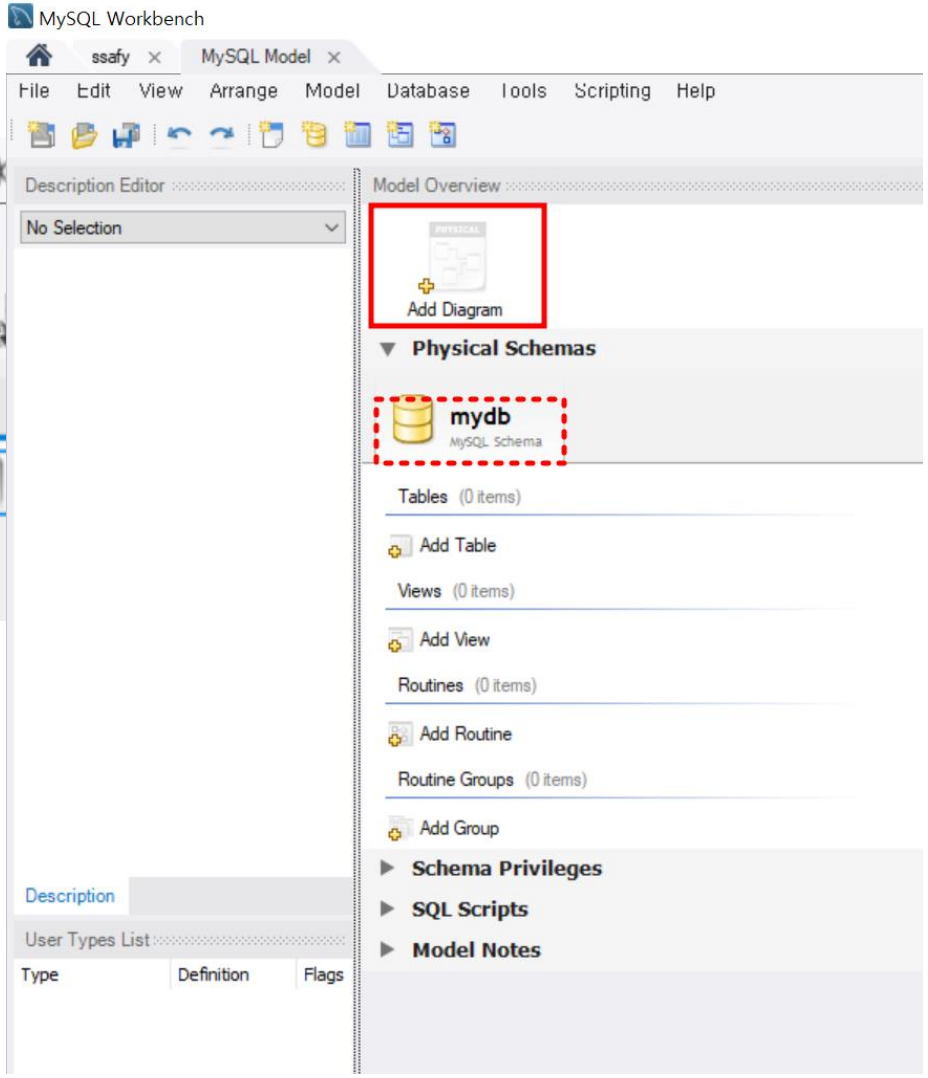
# Workbench DB Modeling

# DataBase Modeling

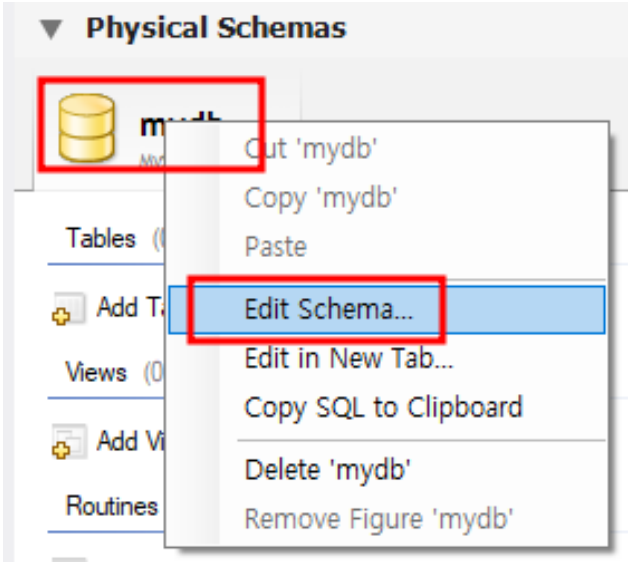
- File >> New Model >> MySQL Model Tab Menu

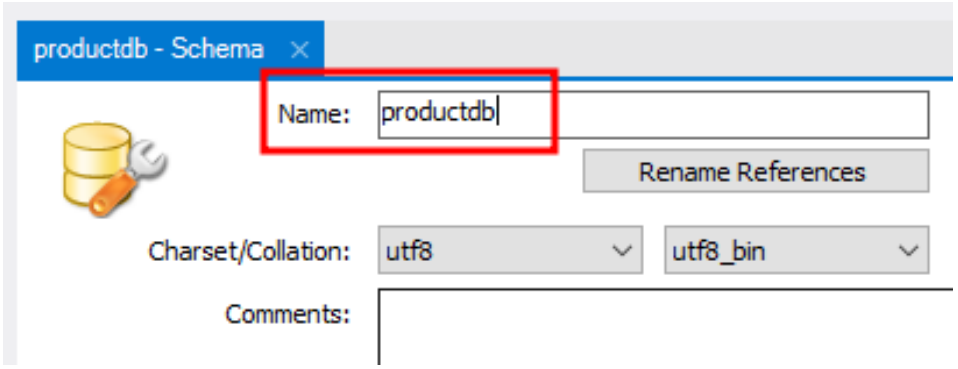


# DataBase Modeling

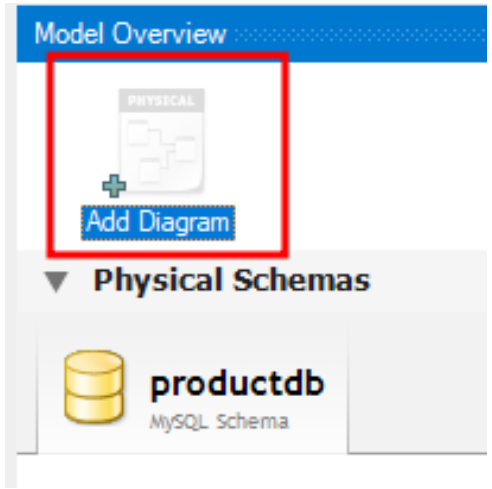
- mydb >> 우클릭 >> Edit Schema >> Name: productdb

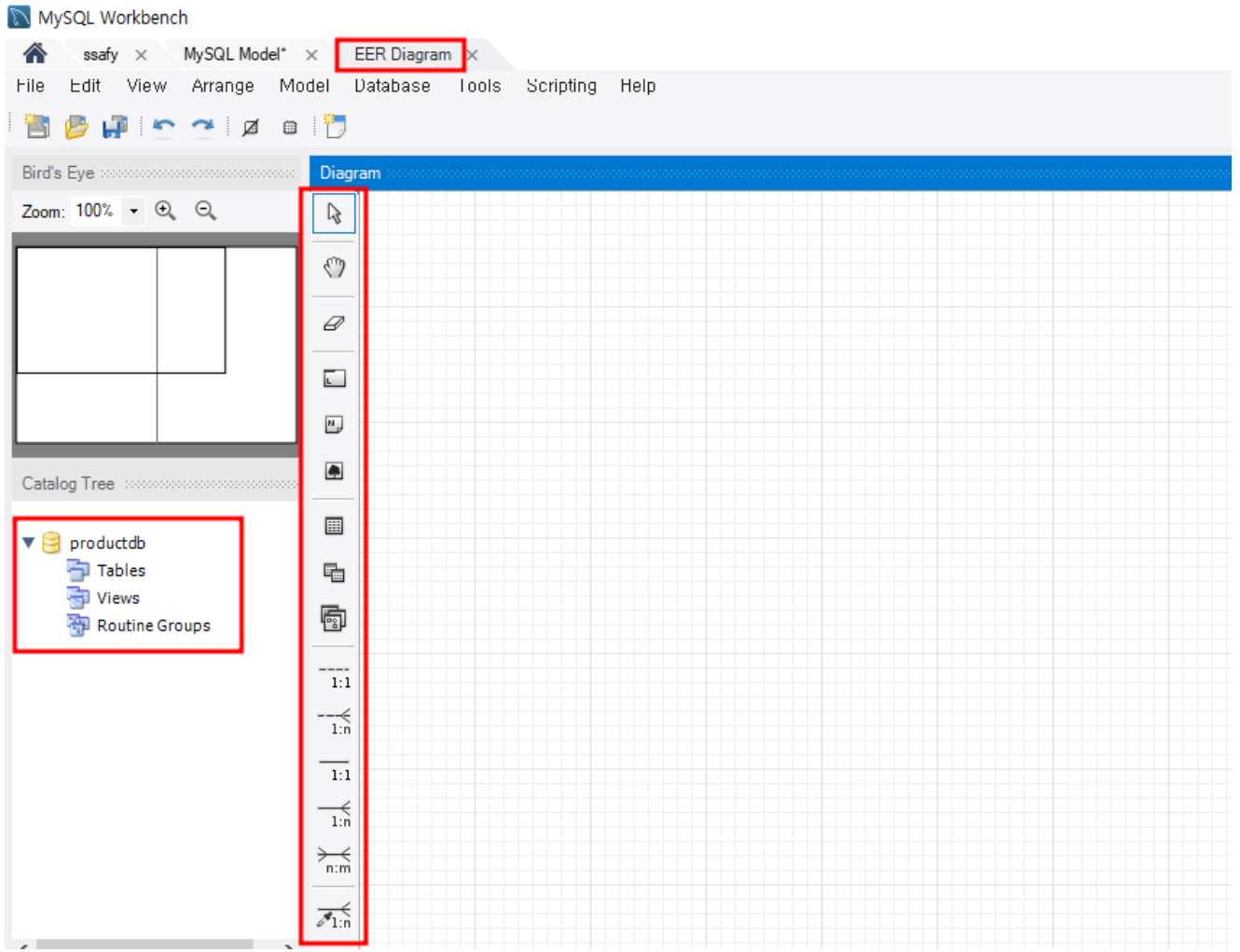


# DataBase Modeling: Add Diagram

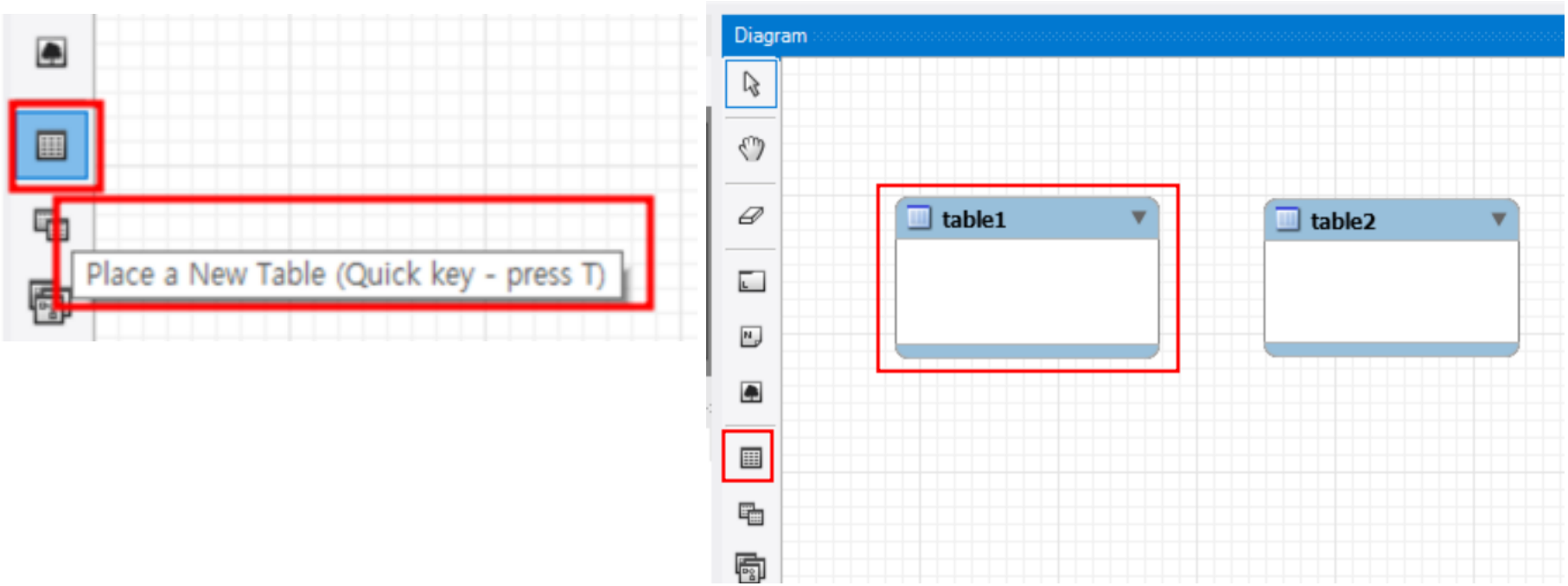
- +Add Diagram >> EER Diagram Tab



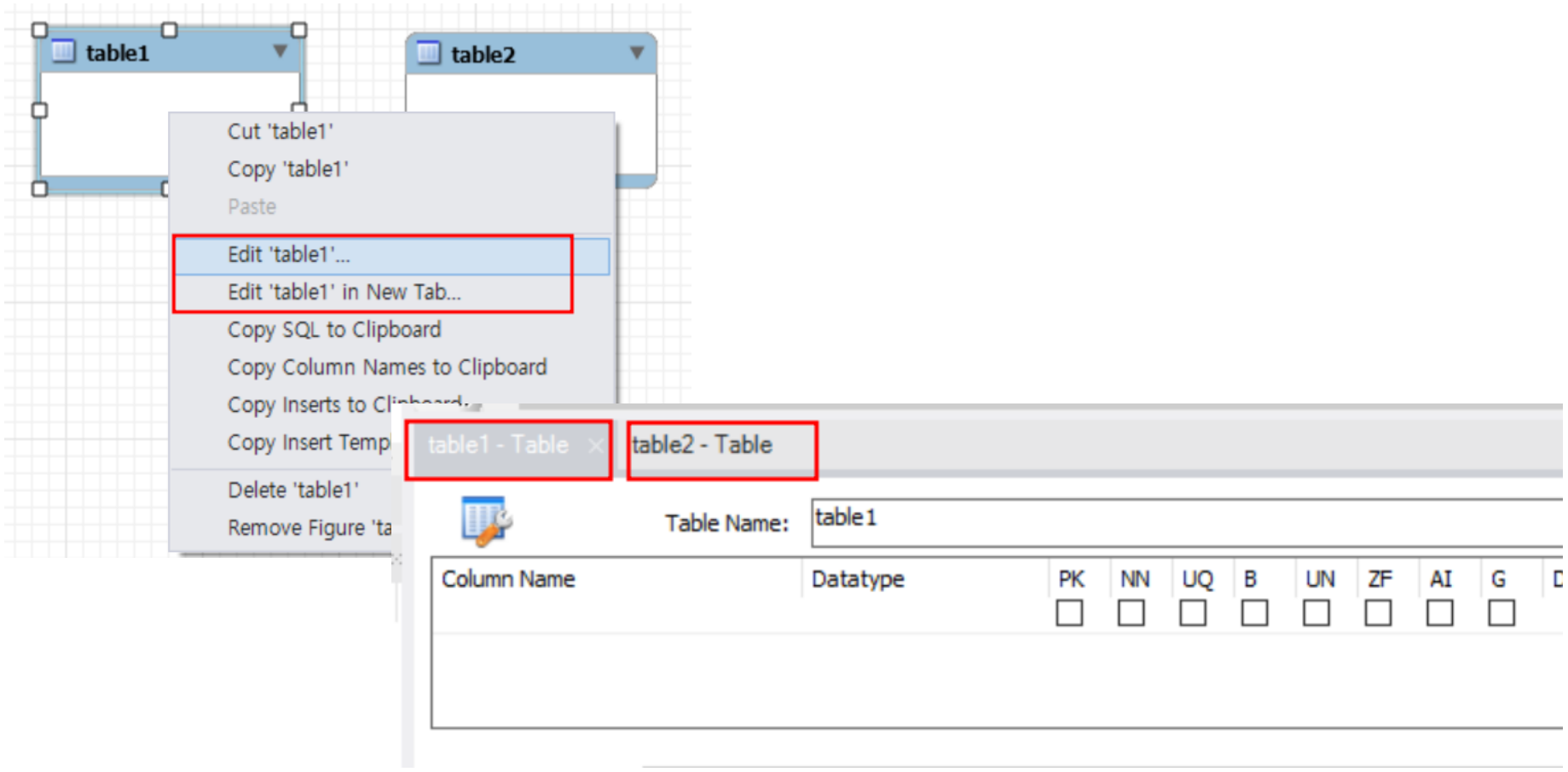
# DataBase Modeling: New Table

- Diagram >> Place a New Table >> table1 / table2



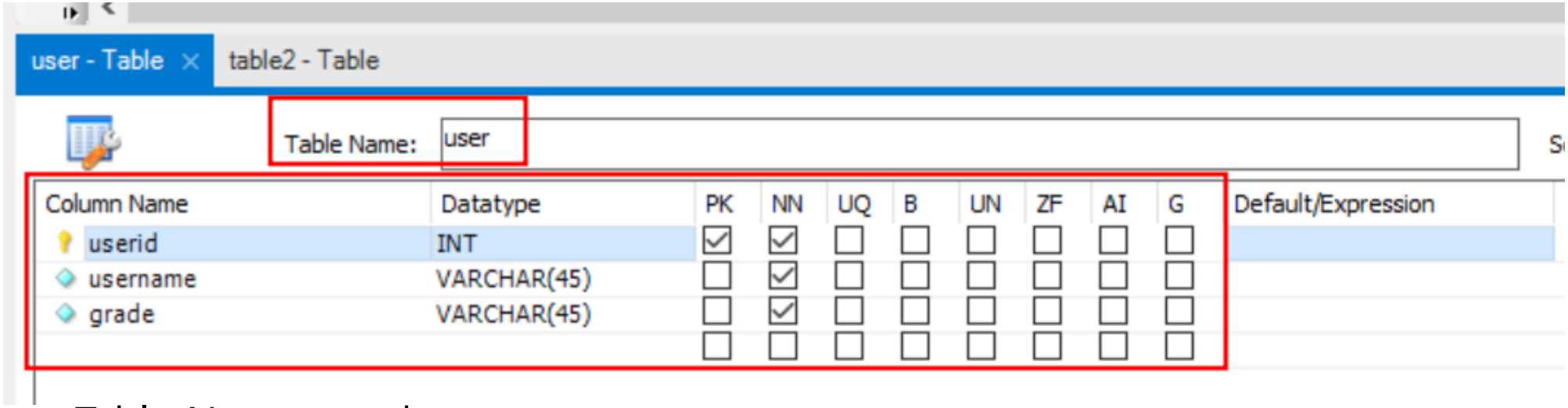
# DataBase Modeling: Table

- Diagram >> Place a New Table >> table1 >> 우클릭
  - Edit ‘table1’...
  - Edit ‘table2’ in New Tab...

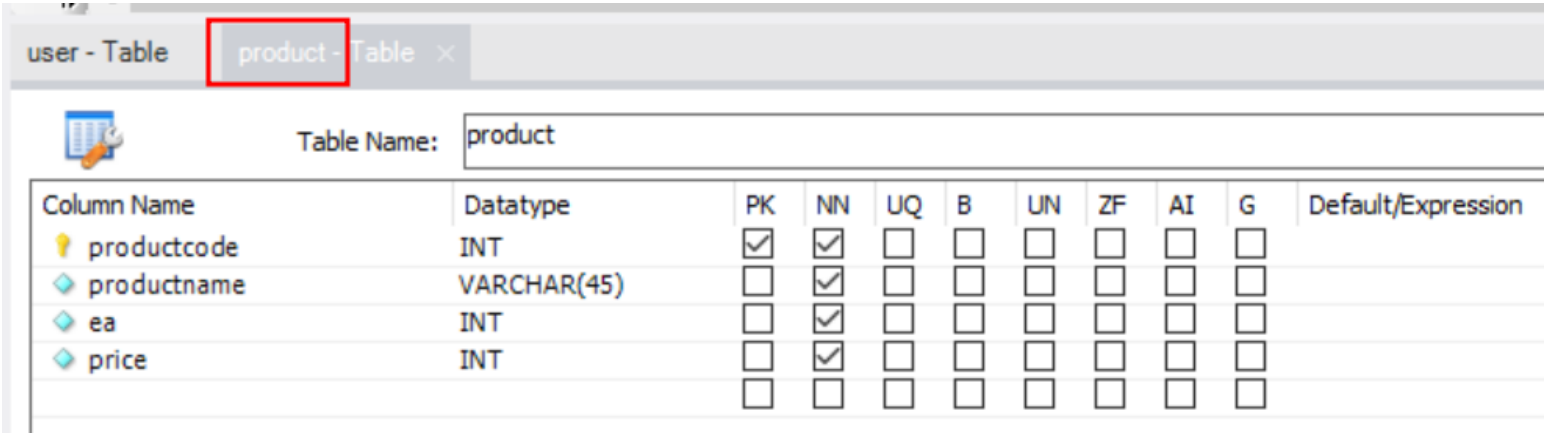


# DataBase Modeling: Table

- table1 : Table >> Table Name: user

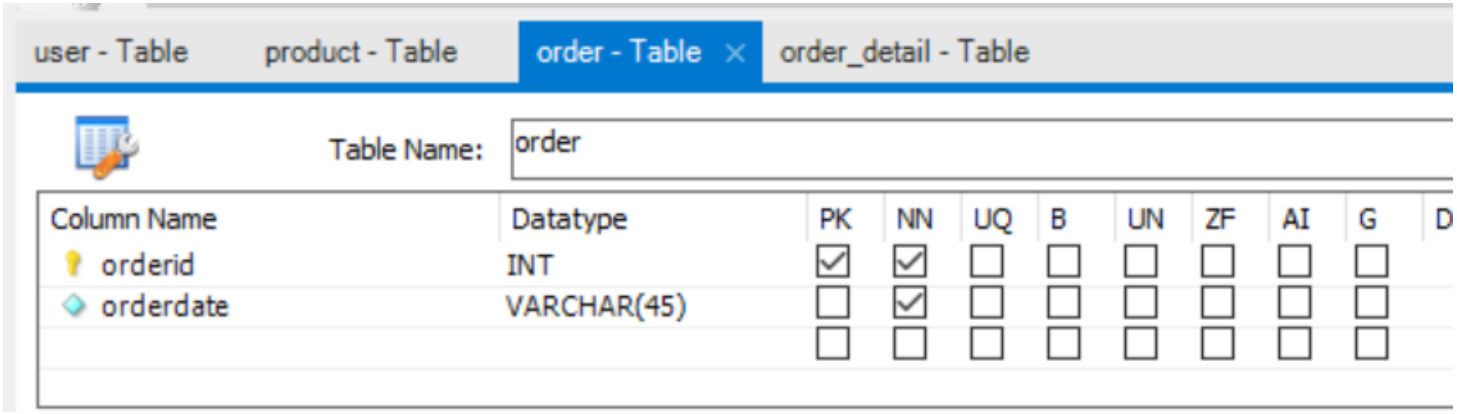



- Table Name: product

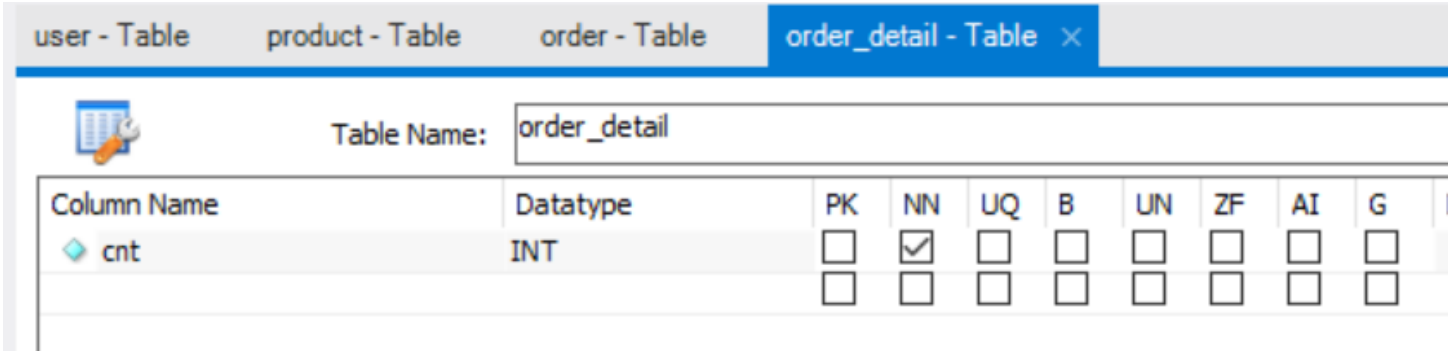


# DataBase Modeling: Table

- Table Name: order

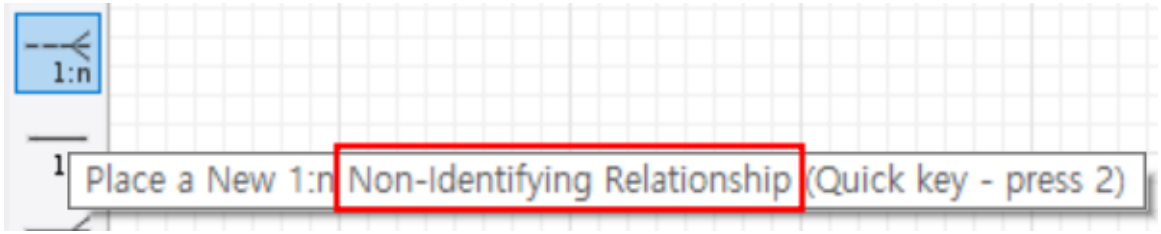



- Table Name: order_detail

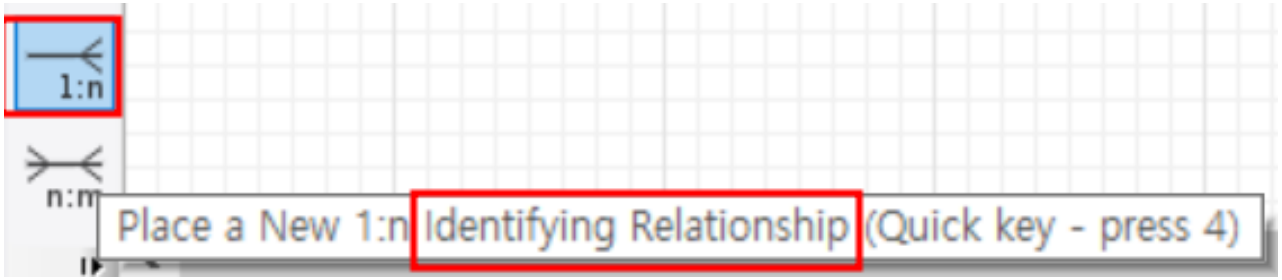


# DataBase Modeling: Entity Relationship

- 비식별관계
  - FK가 참조하는 테이블에서 일반 속성 사용
  - 점선 관계선

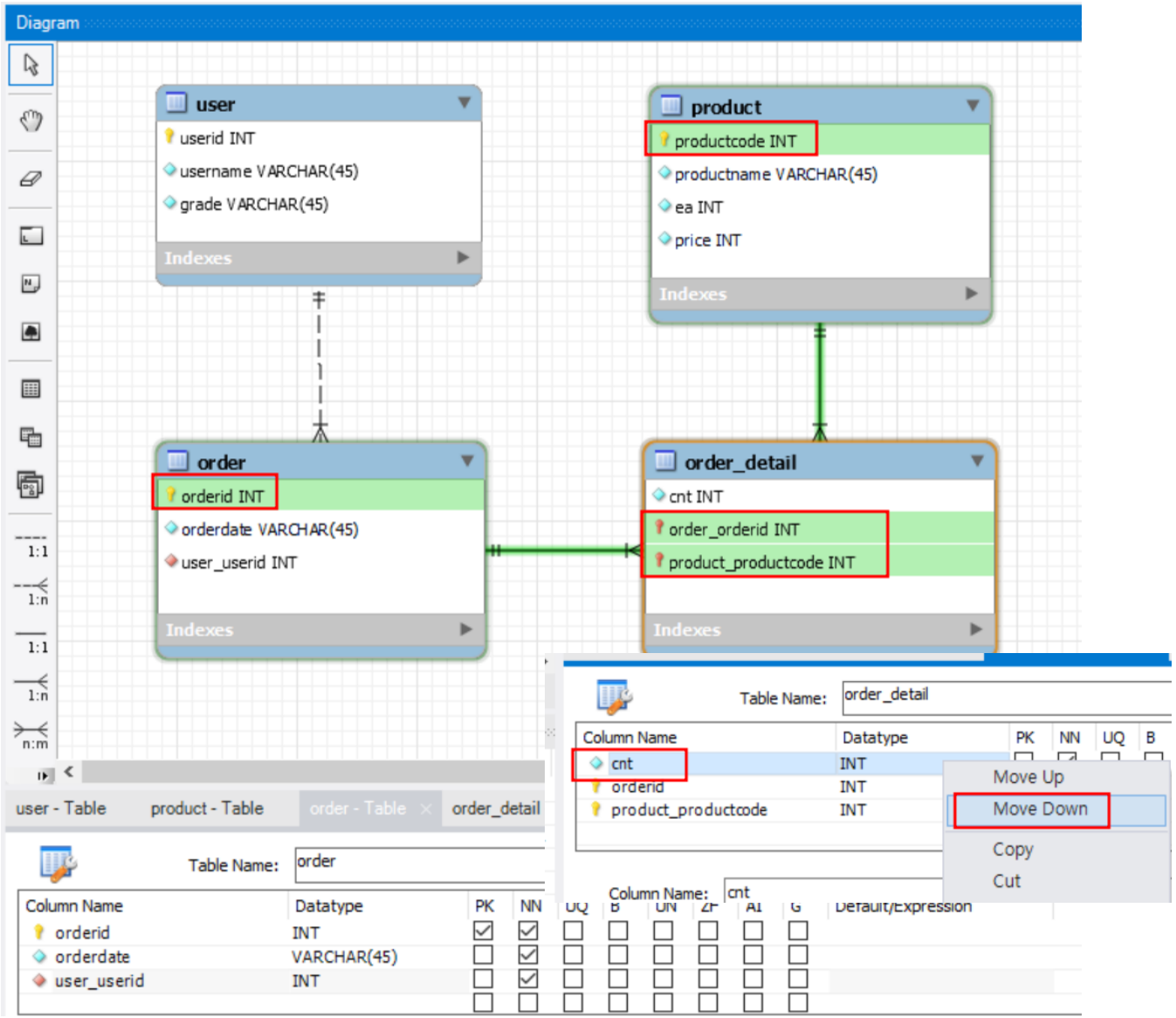



- 식별관계
  - FK가 참조하는 테이블에서 PK 속성 사용
  - 실선 관계선



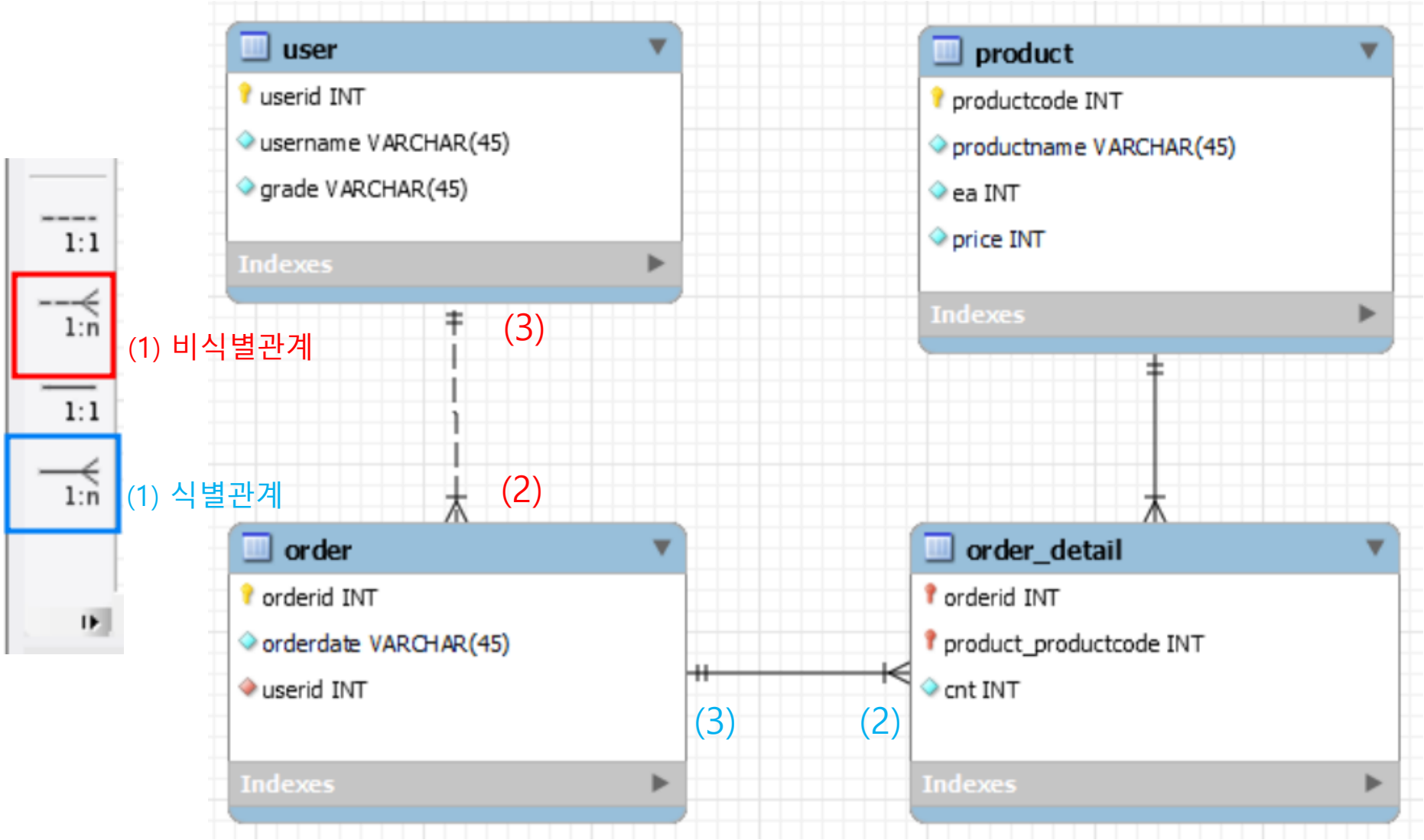
# DataBase Modeling : Entity Relationship :

- 회원 ➔ 주문
- 주문 ➔ 주문상세
- 상품 ➔ 주문상세



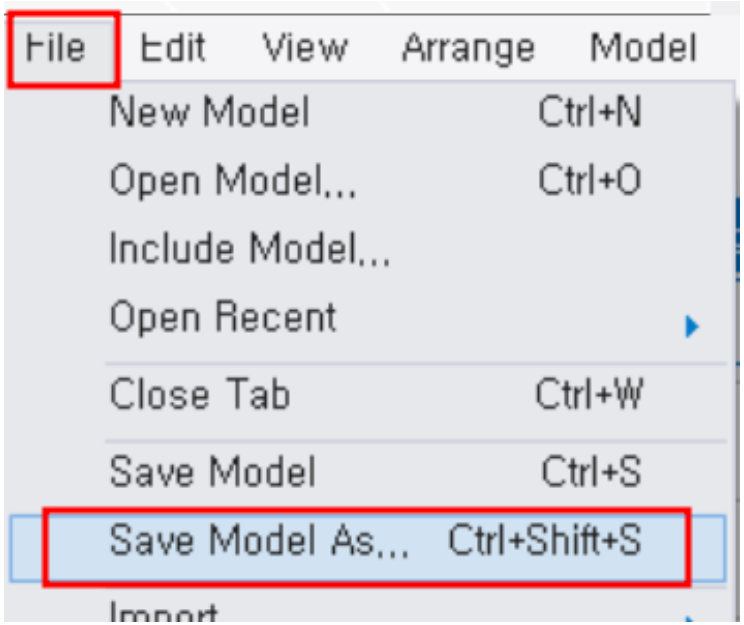
# DataBase Modeling: Entity Relationship

- 회원 / 상품 / 주문 / 주문상세



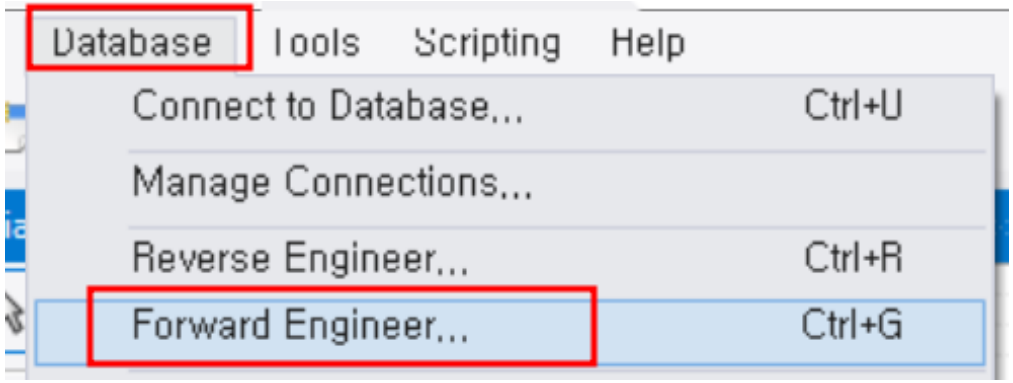
# DataBase Modeling: Save Model

- File >> Save Model As... >>
  - C:\SSAFY\db_modeling\productdb.mwb
  - 저장폴더 영문명 사용: 한글 폴더명 오류 발생(workbench 버그)



# DataBase Modeling: Database 물리적 모델 변환

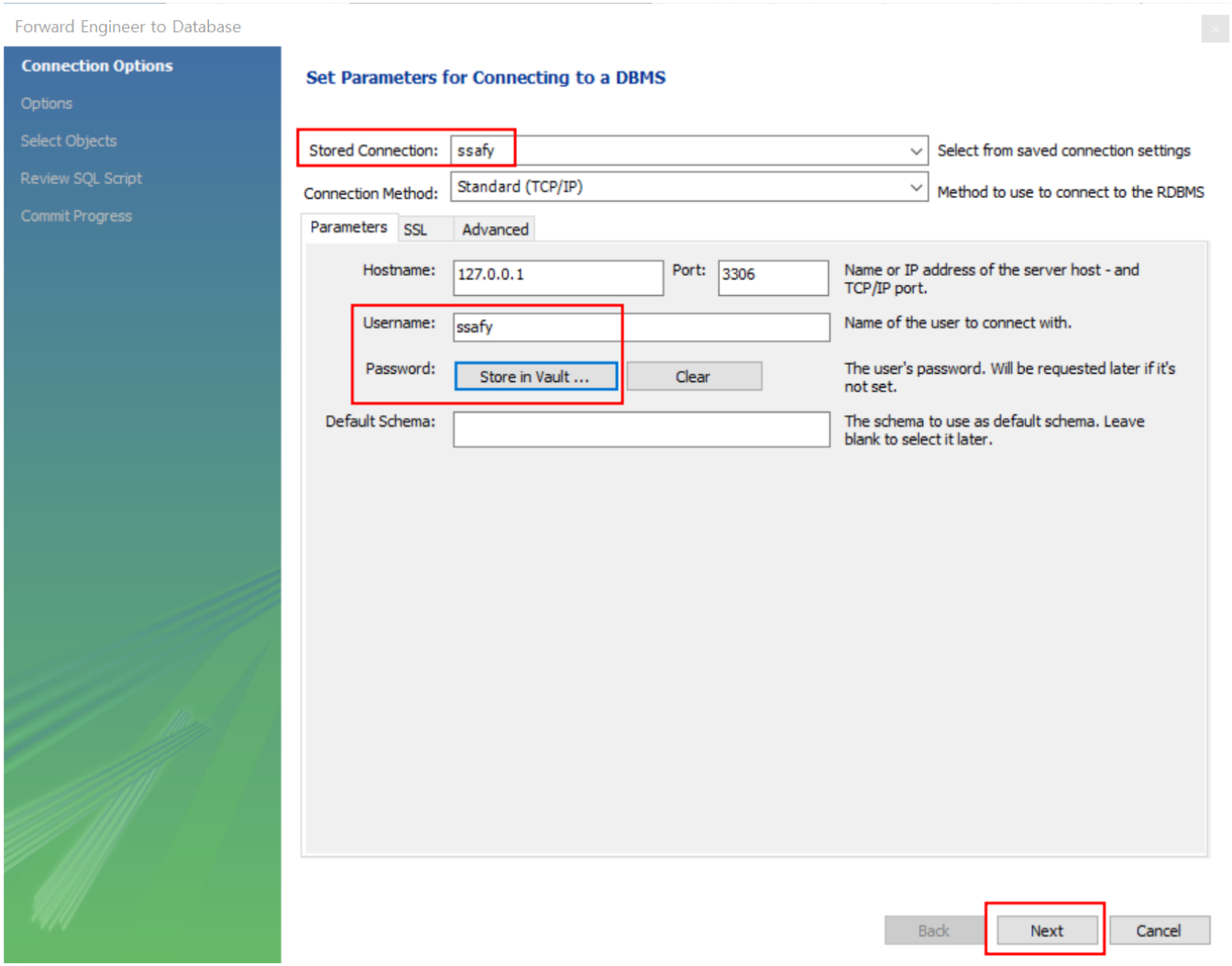
- Database >> Forward Engineer...



# DataBase Modeling: Database 물리적 모델 변환

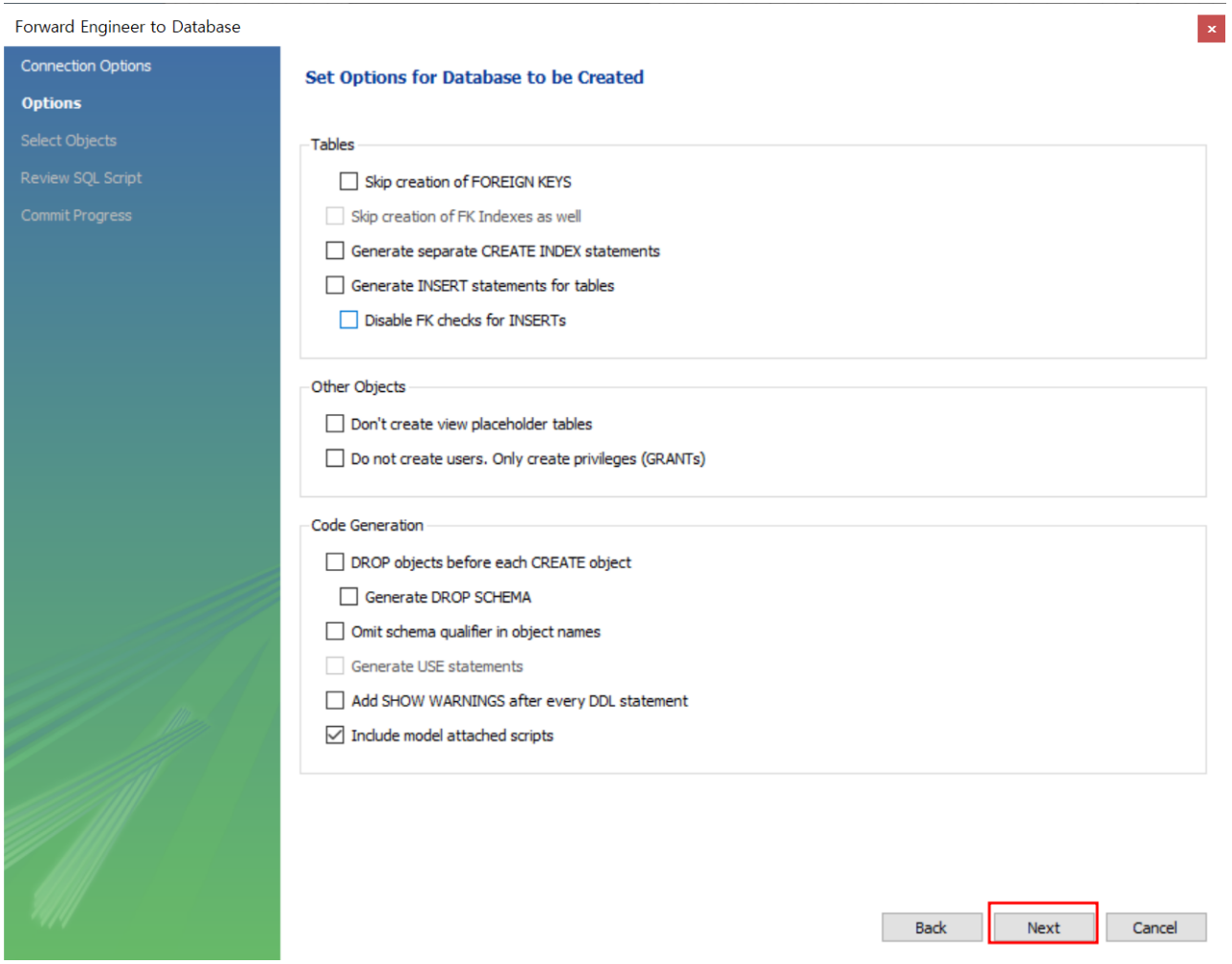
- Database >> Forward Engineer…

  >> Set Parameters for Connecting to a DBMS



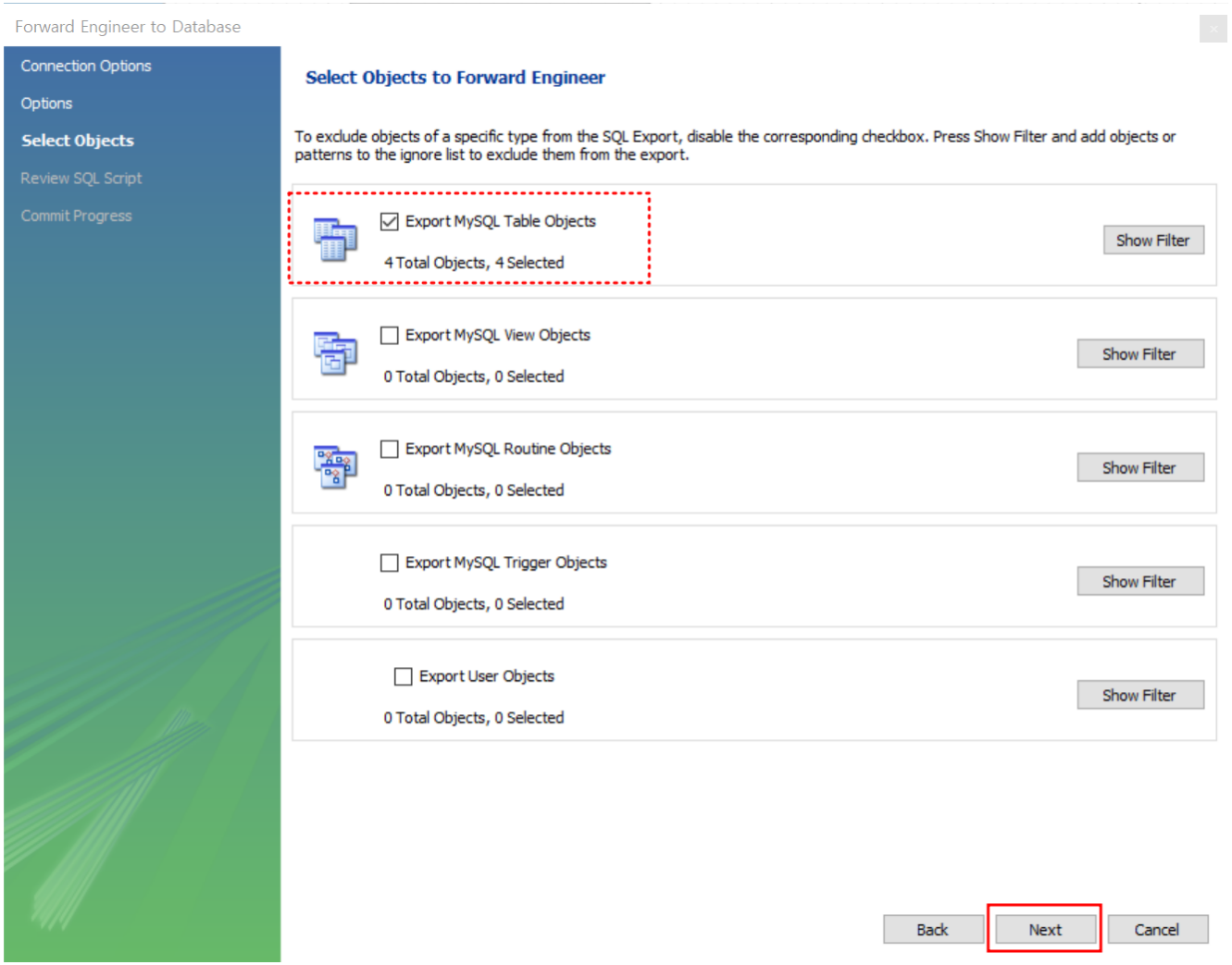
# DataBase Modeling: Database 물리적 모델 변환

- Database >> Forward Engineer…
  >> Set Options for Database to be Created >> Next



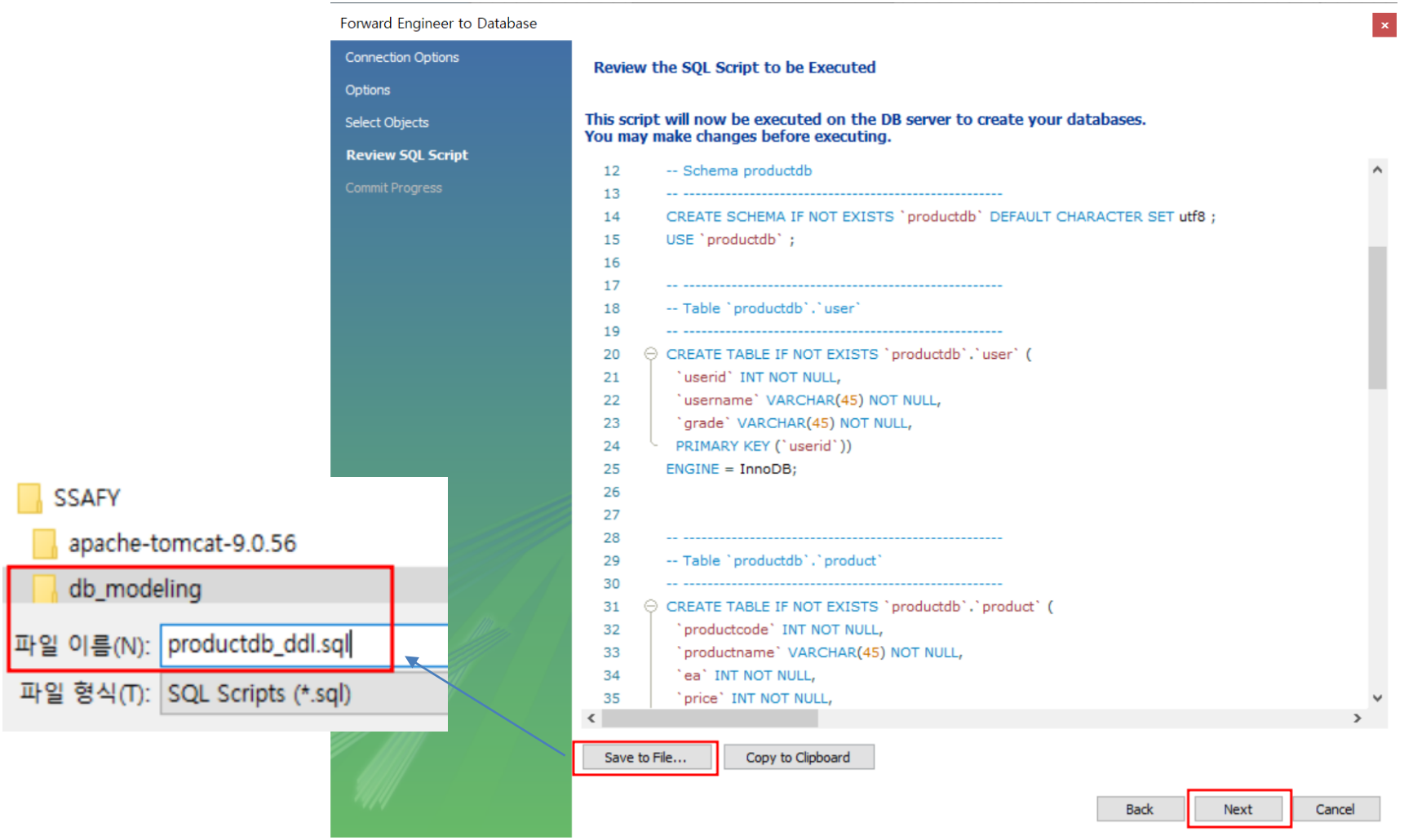
# DataBase Modeling: Database 물리적 모델 변환

- Database >> Forward Engineer…
  >> Select Objects to Forward Engineer >> Next



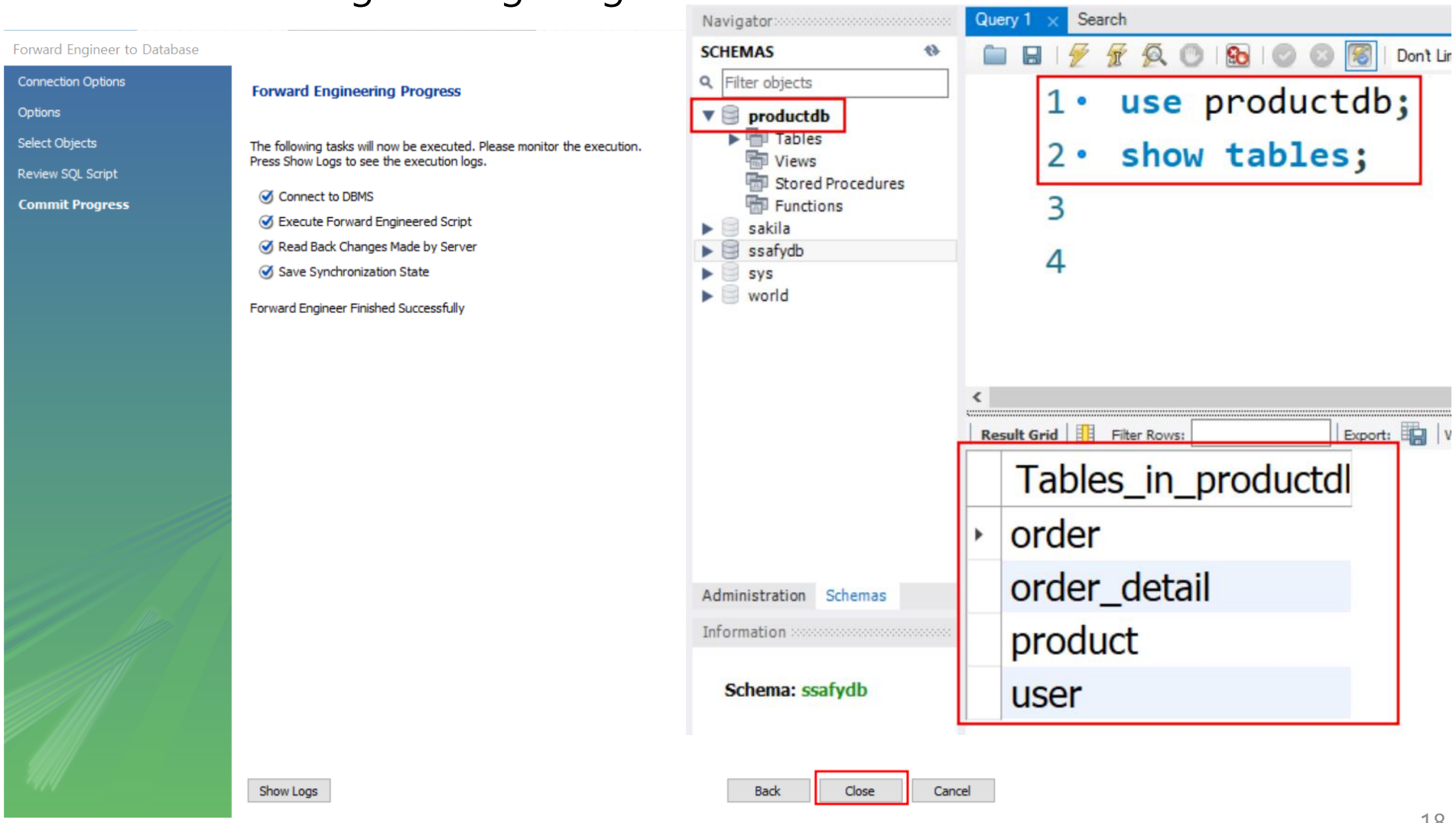
# DataBase Modeling: Database 물리적 모델 변환

- Database >> Forward Engineer…
  >> Review the SQL Script to be Executed >> Save to File… >> Next



# DataBase Modeling: Database 물리적 모델 변환

- Database >> Forward Engineer…
  >> Forward Engineering Progress

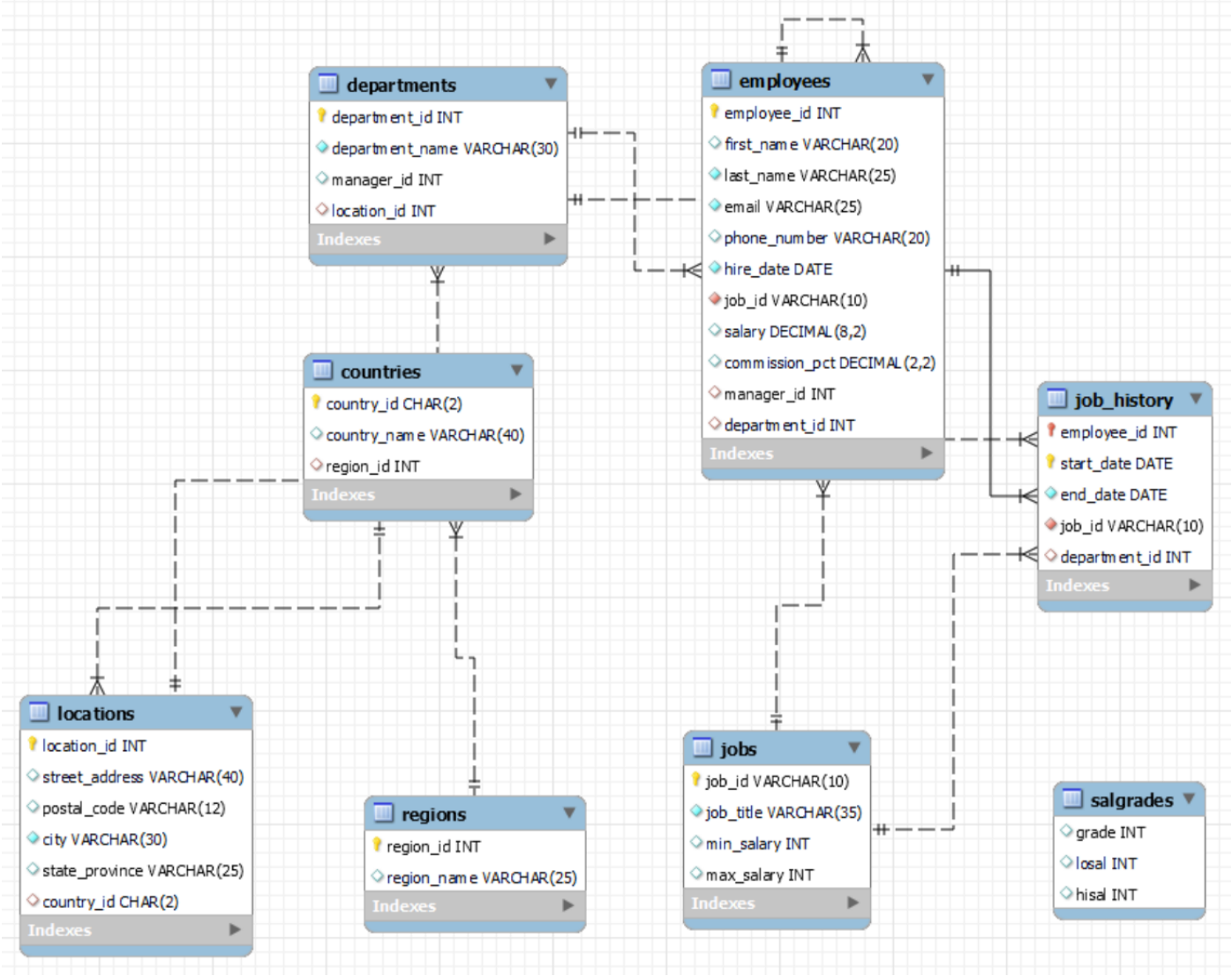


# DataBase ➔ Modeling: Reverse Engineering

- DataBase >> Reverse Engineer
- Set Parameters for Connecting to a DBMS >> Next
- Connect to DBMS and Fetch Information >> 모두 체킹 확인 >> Next
- Select the schemas you want to include >> “ssafydb” 선택 >> Next
- Retrive and Reverse Engineer Schema Object >> 모두 체킹 확인 >> Next
- 기본으로 모두 선택된 상태 >> Execute
  - Show Filter >> 필요한 내용만 선택 가능
- Reverse Engineering Progress >> 모두 체킹 확인 >> Next >> Finish
- 변환 완료된 Database Modeling Diagram 확인
- File >> Save Model as… >> C:\SSAFY\db_modeling\ssafydb.mwb

# DataBase ➔ Modeling: Reverse Engineering

- ssafydb ER Diagram



# DB Modeling Tools

- ERWin
- Microsoft Visio
- SQL Power Architect
- MySQL Workbench
- exERD