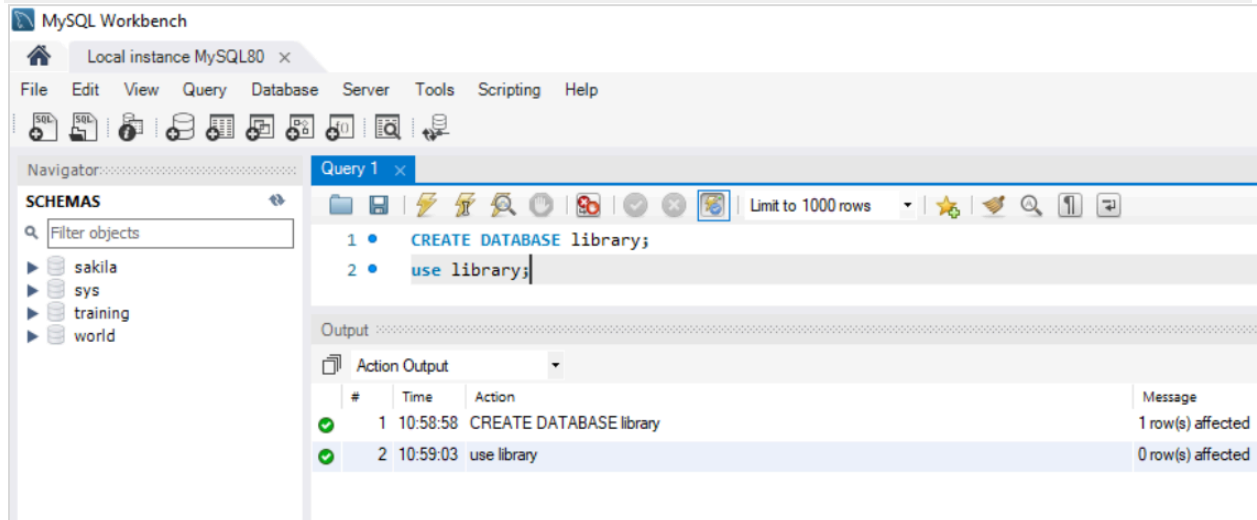


Assignment 4: Write SQL statements to CREATE a new database and tables that reflect the library schema you designed earlier. Use ALTER statements to modify the table structures and DROP statements to remove a redundant table.

```
CREATE DATABASE library;  
use library;
```



```
CREATE TABLE Authors (  
  author_id INT PRIMARY KEY,  
  author_name VARCHAR(20) NOT NULL  
);  
  
CREATE TABLE Books (  
  book_id INT PRIMARY KEY,  
  title VARCHAR(40) NOT NULL,  
  isbn VARCHAR(20) UNIQUE NOT NULL,  
  author_id INT REFERENCES Authors(author_id)  
);  
  
CREATE TABLE Members (  
  member_id INT PRIMARY KEY,  
  member_name VARCHAR(20) NOT NULL,  
  email VARCHAR(20) UNIQUE NOT NULL,  
  phone_number VARCHAR(10)  
);  
  
CREATE TABLE Borrowed (  
  borrow_id INT PRIMARY KEY,  
  book_id INT REFERENCES Books(book_id),  
  member_id INT REFERENCES Members(member_id),  
  loan_date DATE NOT NULL ,  
  return_date DATE  
);
```

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

library

- Tables
 - authors
 - books
 - members
- Views
- Stored Procedures
- Functions

sakila

sys

training

world

Administration Schemas

Information

No object selected

Query 1 x

Limit to 1000 rows

```

1 CREATE TABLE Authors (
2   author_id INT PRIMARY KEY,
3   author_name VARCHAR(20) NOT NULL
4 );
5
6 CREATE TABLE Books (
7   book_id INT PRIMARY KEY,
8   title VARCHAR(40) NOT NULL,
9   isbn VARCHAR(20) UNIQUE NOT NULL,
10  author_id INT REFERENCES Authors(author_id)
11 );
12
13 CREATE TABLE Members (
14   member_id INT PRIMARY KEY,
15   member_name VARCHAR(20) NOT NULL,
16   email VARCHAR(20) UNIQUE NOT NULL,
17   phone_number VARCHAR(10)
18 );

```

Output

Action Output

#	Time	Action	Message
1	11:05:18	CREATE TABLE Authors (author_id INT PRIMARY KEY, author_name VARCHAR(20) NOT NULL	0 row(s) affected
2	11:05:18	CREATE TABLE Books (book_id INT PRIMARY KEY, title VARCHAR(40) NOT NULL, ...	0 row(s) affected
3	11:05:18	CREATE TABLE Members (member_id INT PRIMARY KEY, member_name VARCHAR(20) NOT NULL	0 row(s) affected

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

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- Tables
 - authors
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 - borrowed
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- Functions

sakila

sys

training

world

Query 1 x

Limit to 1000 rows

```

1 CREATE TABLE Borrowed (
2   borrow_id INT PRIMARY KEY,
3   book_id INT REFERENCES Books(book_id),
4   member_id INT REFERENCES Members(member_id),
5   loan_date DATE NOT NULL,
6   return_date DATE
7 );

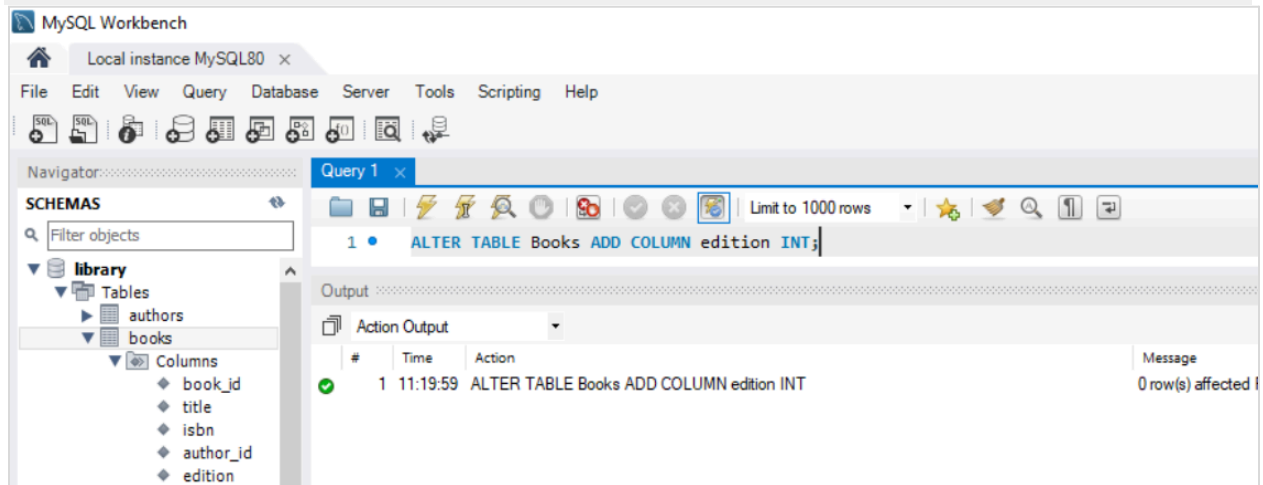
```

Output

Action Output

#	Time	Action	Message
1	11:17:30	CREATE TABLE Borrowed (borrow_id INT PRIMARY KEY, book_id INT REFERENCES Books(book_id),	0 row(s) affected

```
ALTER TABLE Books ADD COLUMN edition INT;
```



```
DROP TABLE IF EXISTS authors;
```

