

# SQL Internship Task 1: Library Management System

---

## Step 1: Create the Database

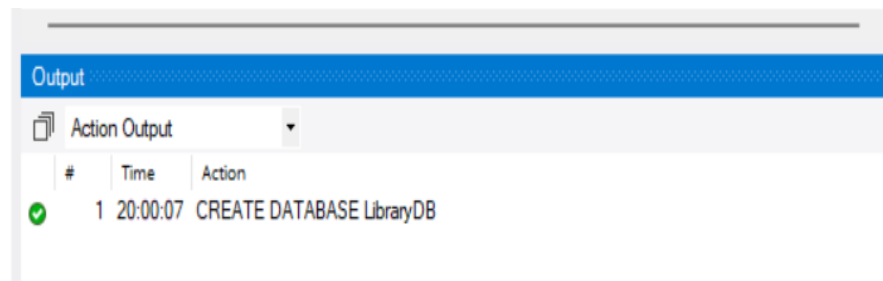
**Query:**

CREATE DATABASE LibraryDB;

**Explanation:**

This query creates a new database named 'LibraryDB'.

**Output:**



#	Time	Action
✓ 1	20:00:07	CREATE DATABASE LibraryDB

---

## Step 2: Use the Created Database

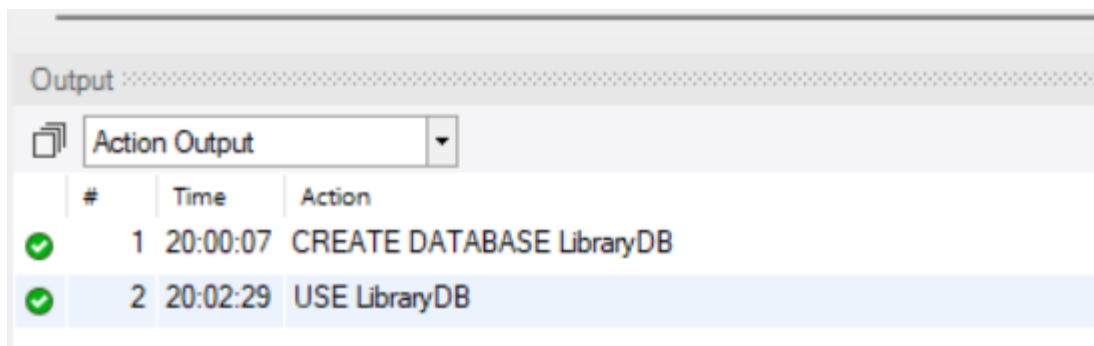
**Query:**

USE LibraryDB;

**Explanation:**

Switches the active database context to 'LibraryDB'.

**Output:**



#	Time	Action
✓ 1	20:00:07	CREATE DATABASE LibraryDB
✓ 2	20:02:29	USE LibraryDB

### Step 3: Create the Books Table

#### Query:

```
CREATE TABLE Books (  
    BookID INT PRIMARY KEY AUTO_INCREMENT,  
    Title VARCHAR(100),  
    Author VARCHAR(100),  
    CopiesAvailable INT  
);
```

#### Explanation:

Creates a table named 'Books' with columns for Book ID, Title, Author, and Copies Available.

#### Output:

Output				
Action Output				
#	Time	Action	Message	
✓ 1	20:00:07	CREATE DATABASE LibraryDB	1 row(s) affected	
✓ 2	20:02:29	USE LibraryDB	0 row(s) affected	
✓ 3	20:03:04	CREATE TABLE Books ( BookID INT PRIMARY KEY AUTO_INCREMENT, Title VARCHAR(100), Author...	0 row(s) affected	

### Step 4: Insert Data into Books Table

#### Query:

```
INSERT INTO Books (Title, Author, CopiesAvailable)  
VALUES ('I Dont Love You Anymore', 'Ritwik Singh', 40);
```

#### Explanation:

Populates the 'Books' table with sample data.

#### Output:

Result Grid				
Filter Rows: Edit: Export/Import: Wrap Cell Content:				
BookID	Title	Author	CopiesAvailable	
1	I dont love you anymore	RitWik Singh	40	
* NULL	NULL	NULL	NULL	

Books 1 x				
Output				
Action Output				
#	Time	Action	Message	
✓ 3	20:03:04	CREATE TABLE Books ( BookID INT PRIMARY KEY AUTO_INCREMENT, Title VARCHAR(100), Aut...	0 row(s) affected	
✓ 4	20:04:15	CREATE TABLE Members ( MemberID INT PRIMARY KEY AUTO_INCREMENT, Name VARCHAR(100)...	0 row(s) affected	
✓ 5	20:04:27	CREATE TABLE Transactions ( TransactionID INT PRIMARY KEY AUTO_INCREMENT, BookID INT, ...	0 row(s) affected	
✗ 6	20:04:40	INSERT INTO Books (Title, Author, Genre, CopiesAvailable) VALUES ('I dont love you anymore', 'RitWik Singh...	Error Code: 1054. Unkno	
✓ 7	20:05:28	INSERT INTO Books (Title, Author,CopiesAvailable)VALUES ('I dont love you anymore', 'RitWik Singh', 40)	1 row(s) affected	
✓ 8	20:05:42	INSERT INTO Members (Name, Email, Phone) VALUES ('Riya Kharade', 'riya@gmail.com', '87356')	1 row(s) affected	
✓ 9	20:05:53	SELECT * FROM Books LIMIT 0, 1000	1 row(s) returned	

---

## Step 5: Retrieve Data

### Query:

```
SELECT * FROM Books;
```

### Explanation:

Retrieves all records from the 'Books' table.

### Output:

Result Grid					Filter Rows:	Edit:	Export/Import:	Wrap Cell Content:
	BookID	Title	Author	CopiesAvailable				
▶	1	I dont love you anymore	RitWik Singh	40				
*	NULL	NULL	NULL	NULL				

Books 1 x				
Output				
Action Output				
#	Time	Action	Message	
✓	3 20:03:04	CREATE TABLE Books ( BookID INT PRIMARY KEY AUTO_INCREMENT, Title VARCHAR(100), Aut...	0 row(s) affected	
✓	4 20:04:15	CREATE TABLE Members ( MemberID INT PRIMARY KEY AUTO_INCREMENT, Name VARCHAR(100)...	0 row(s) affected	
✓	5 20:04:27	CREATE TABLE Transactions ( TransactionID INT PRIMARY KEY AUTO_INCREMENT, BookID INT, ...	0 row(s) affected	
✗	6 20:04:40	INSERT INTO Books (Title, Author, Genre, CopiesAvailable) VALUES ('I dont love you anymore', 'RitWik Singh'...	Error Code: 1054. Unkno	
✓	7 20:05:28	INSERT INTO Books (Title, Author,CopiesAvailable)VALUES ('I dont love you anymore', 'RitWik Singh', 40)	1 row(s) affected	
✓	8 20:05:42	INSERT INTO Members (Name, Email, Phone) VALUES ('Riya Kharade', 'riya@gmail.com', '87356')	1 row(s) affected	
✓	9 20:05:53	SELECT * FROM Books LIMIT 0, 1000	1 row(s) returned	

---

## Step 6: Update Data in Books Table

### Query:

```
UPDATE Books  
SET CopiesAvailable = CopiesAvailable - 1  
WHERE BookID = 1;
```

### Explanation:

Updates the 'CopiesAvailable' column by decreasing the count for the book with Book ID 1.

### Output:

Output				
Action Output				
#	Time	Action	Message	
✓	5 20:04:27	CREATE TABLE Transactions ( TransactionID INT PRIMARY KEY AUTO_INCREMENT, BookID INT, ...	0 row(s) affected	
✗	6 20:04:40	INSERT INTO Books (Title, Author, Genre, CopiesAvailable) VALUES ('I dont love you anymore', 'RitWik Singh'...	Error Code: 1054. Unknown column 'Genre' in field list'	
✓	7 20:05:28	INSERT INTO Books (Title, Author,CopiesAvailable)VALUES ('I dont love you anymore', 'RitWik Singh', 40)	1 row(s) affected	
✓	8 20:05:42	INSERT INTO Members (Name, Email, Phone) VALUES ('Riya Kharade', 'riya@gmail.com', '87356')	1 row(s) affected	
✓	9 20:05:53	SELECT * FROM Books LIMIT 0, 1000	1 row(s) returned	
✓	10 20:06:17	SELECT * FROM Members LIMIT 0, 1000	1 row(s) returned	
✓	11 20:06:29	UPDATE Books SET CopiesAvailable = CopiesAvailable - 1 WHERE BookID = 1	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	

---

## Step 7: Delete Data from Transactions Table

### Query:

DELETE FROM Transactions WHERE TransactionID = 1;

### Explanation:

Deletes a record from the 'Transactions' table where the Transaction ID is 1.

### Output:

Output				
Action Output				
	#	Time	Action	Message
✗	6	20:04:40	INSERT INTO Books (Title, Author, Genre, CopiesAvailable) VALUES ('I dont love you anymore', 'RitWik Singh...	Error Code: 1054. Unknow
✓	7	20:05:28	INSERT INTO Books (Title, Author,CopiesAvailable)VALUES ('I dont love you anymore', 'RitWik Singh', 40)	1 row(s) affected
✓	8	20:05:42	INSERT INTO Members (Name, Email, Phone) VALUES ('Riya Kharade', 'riya@gmail.com', '87356')	1 row(s) affected
✓	9	20:05:53	SELECT * FROM Books LIMIT 0, 1000	1 row(s) returned
✓	10	20:06:17	SELECT * FROM Members LIMIT 0, 1000	1 row(s) returned
✓	11	20:06:29	UPDATE Books SET CopiesAvailable = CopiesAvailable - 1 WHERE BookID = 1	1 row(s) affected Rows m
✓	12	20:06:43	DELETE FROM Transactions WHERE TransactionID = 1	0 row(s) affected