

Once upon a time, in a small town called SQLville, there was a renowned bookstore named "Books & Bytes." The store had a vast collection of books, ranging from classic literature to modern technology.

As part of their college curriculum, the students of SQLville University were tasked with learning the basics of MySQL and database management. To make the learning experience more interactive and practical, the bookstore decided to collaborate with the university and create a hands-on assignment for the students.

Assignment:

You are a student studying computer science at SQLville University, and you have recently started your journey into the world of databases and SQL. The assignment given to you by "Books & Bytes" is as follows:

Create a database named "BooksDB" to store information about the bookstore's collection of books.

Design a table called "Books" to store the details of each book, including the book's title, author, genre, publication year, and price.

Insert at least five books into the "Books" table, ensuring that each book has unique information for all columns.

Write SQL queries to perform the following tasks:

- a. Retrieve all the books from the database.
- b. Retrieve the details of a book based on its title.
- c. Update the price of a book.
- d. Delete a book from the database based on its title.

Your task is to complete the assignment by writing the required SQL queries and demonstrating your understanding of basic MySQL concepts.

Good luck with your assignment, and may your SQL skills shine brightly in the realm of databases!

a. Retrieve all the books from the database.

```
CREATE DATABASE Book;
```

```
USE Book;
```

```
CREATE TABLE BOOKS (ID INT PRIMARY KEY,TITLE VARCHAR(25),AUTHOR VARCHAR(20),GENRE  
VARCHAR(20),PUBLICATION INT,PRICE INT);
```

```
INSERT INTO BOOKS VALUES (1, "Ponniyen selvan","KALKI","Historical",1887,999);
```

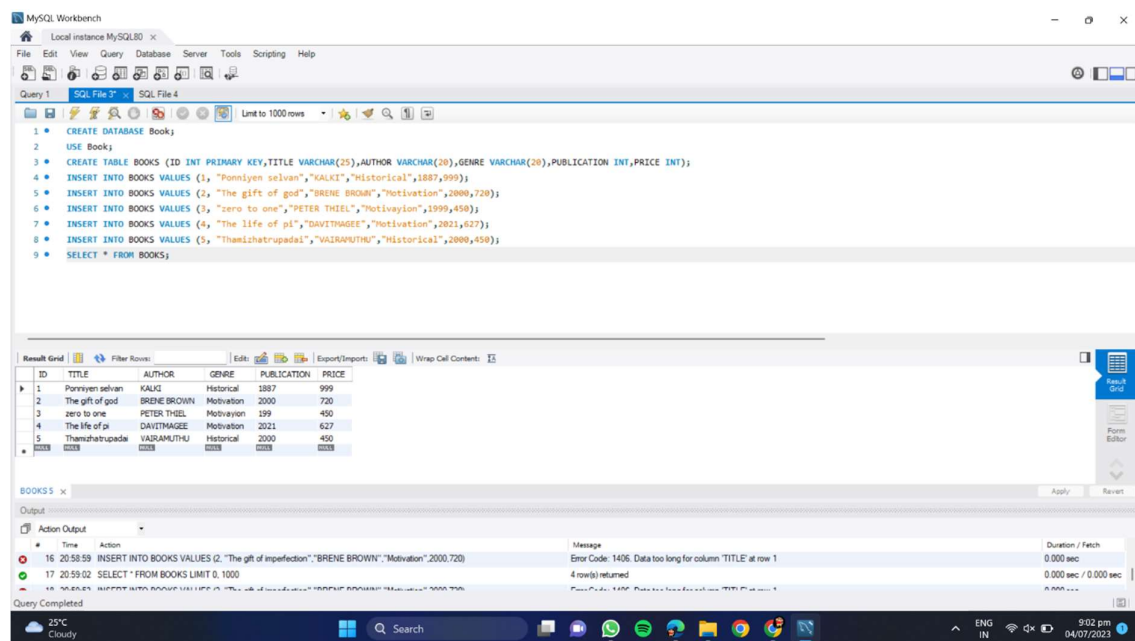
```
INSERT INTO BOOKS VALUES (2, "The gift of god","BRENE BROWN","Motivation",2000,720);
```

```
INSERT INTO BOOKS VALUES (3, "zero to one","PETER THIEL","Motivayion",1999,450);
```

```
INSERT INTO BOOKS VALUES (4, "The life of pi","DAVITMAGEE","Motivation",2021,627);
```

```
INSERT INTO BOOKS VALUES (5, "Thamizhatrupadai","VAIRAMUTHU","Historical",2000,450);
```

```
SELECT * FROM BOOKS;
```



b. Retrieve the details of a book based on its title.

CREATE DATABASE Book;

USE Book;

CREATE TABLE BOOKS (ID INT PRIMARY KEY,TITLE VARCHAR(25),AUTHOR VARCHAR(20),GENRE VARCHAR(20),PUBLICATION INT,PRICE INT);

INSERT INTO BOOKS VALUES (1, "Ponniyen selvan","KALKI","Historical",1887,999);

INSERT INTO BOOKS VALUES (2, "The gift of god","BRENE BROWN","Motivation",2000,720);

INSERT INTO BOOKS VALUES (3, "zero to one","PETER THIEL","Motivayion",1999,450);

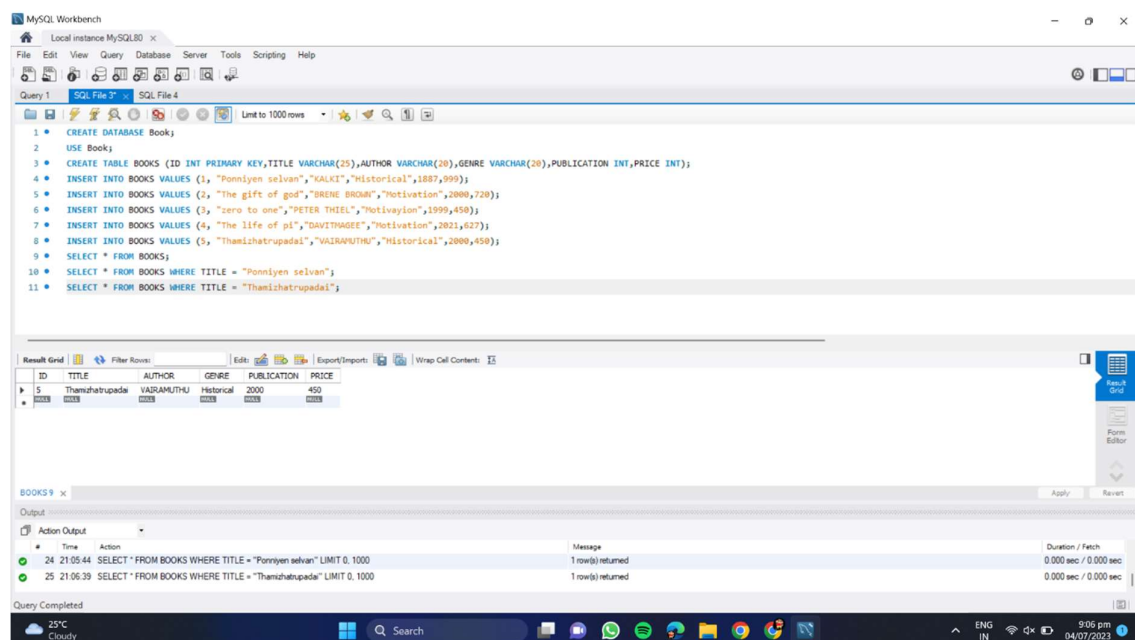
INSERT INTO BOOKS VALUES (4, "The life of pi","DAVITMAGEE","Motivation",2021,627);

INSERT INTO BOOKS VALUES (5, "Thamizhatrupadai","VAIRAMUTHU","Historical",2000,450);

SELECT * FROM BOOKS;

SELECT * FROM BOOKS WHERE TITLE = "Ponniyen selvan";

SELECT * FROM BOOKS WHERE TITLE = "Thamizhatrupadai";



c. Update the price of a book.

CREATE DATABASE Book;

USE Book;

CREATE TABLE BOOKS (ID INT PRIMARY KEY,TITLE VARCHAR(25),AUTHOR VARCHAR(20),GENRE VARCHAR(20),PUBLICATION INT,PRICE INT);

INSERT INTO BOOKS VALUES (1, "Ponniyen selvan","KALKI","Historical",1887,999);

INSERT INTO BOOKS VALUES (2, "The gift of god","BRENE BROWN","Motivation",2000,720);

INSERT INTO BOOKS VALUES (3, "zero to one","PETER THIEL","Motivayion",1999,450);

INSERT INTO BOOKS VALUES (4, "The life of pi","DAVITMAGEE","Motivation",2021,627);

INSERT INTO BOOKS VALUES (5, "Thamizhatrupadai","VAIRAMUTHU","Historical",2000,450);

SELECT * FROM BOOKS;

SELECT * FROM BOOKS WHERE TITLE = "Ponniyen selvan";

SELECT * FROM BOOKS WHERE TITLE = "Thamizhatrupadai";

UPDATE BOOKS SET PRICE = 900 WHERE TITLE = "Ponniyen selvan";

The screenshot displays the MySQL Workbench interface. The top pane shows a series of SQL queries executed in a single transaction. The bottom pane shows the results of these queries, including a table of book data and a log of actions performed.

SQL Queries:

```
1 CREATE DATABASE Book;
2 USE Book;
3 CREATE TABLE BOOKS (ID INT PRIMARY KEY,TITLE VARCHAR(25),AUTHOR VARCHAR(20),GENRE VARCHAR(20),PUBLICATION INT,PRICE INT);
4 INSERT INTO BOOKS VALUES (1, "Ponniyen selvan","KALKI","Historical",1887,999);
5 INSERT INTO BOOKS VALUES (2, "The gift of god","BRENE BROWN","Motivation",2000,720);
6 INSERT INTO BOOKS VALUES (3, "zero to one","PETER THIEL","Motivayion",1999,450);
7 INSERT INTO BOOKS VALUES (4, "The life of pi","DAVITMAGEE","Motivation",2021,627);
8 INSERT INTO BOOKS VALUES (5, "Thamizhatrupadai","VAIRAMUTHU","Historical",2000,450);
9 SELECT * FROM BOOKS;
10 SELECT * FROM BOOKS WHERE TITLE = "Ponniyen selvan";
11 SELECT * FROM BOOKS WHERE TITLE = "Thamizhatrupadai";
12 UPDATE BOOKS SET PRICE = 900 WHERE TITLE = "Ponniyen selvan";
13
```

Result Grid:

ID	TITLE	AUTHOR	GENRE	PUBLICATION	PRICE
1	Ponniyen selvan	KALKI	Historical	1887	900
2	The gift of god	BRENE BROWN	Motivation	2000	720
3	zero to one	PETER THIEL	Motivayion	1999	450
4	The life of pi	DAVITMAGEE	Motivation	2021	627
5	Thamizhatrupadai	VAIRAMUTHU	Historical	2000	450

Output:

Books11

Output

Action Output

#	Time	Action	Message	Duration / Fetch
31	21:24:15	UPDATE BOOKS SET PRICE = 900 WHERE TITLE = "Ponniyen selvan"	0 row(s) affected Rows matched: 1 Changed: 0 Warnings: 0	0.000 sec
32	21:24:28	SELECT * FROM BOOKS LIMIT 0.1000	5 row(s) returned	0.000 sec / 0.000 sec

Query Completed

d. Delete a book from the database based on its title.

CREATE DATABASE Book;

USE Book;

CREATE TABLE BOOKS (ID INT PRIMARY KEY,TITLE VARCHAR(25),AUTHOR VARCHAR(20),GENRE VARCHAR(20),PUBLICATION INT,PRICE INT);

INSERT INTO BOOKS VALUES (1, "Ponniyen selvan","KALKI","Historical",1887,999);

INSERT INTO BOOKS VALUES (2, "The gift of god","BRENE BROWN","Motivation",2000,720);

INSERT INTO BOOKS VALUES (3, "zero to one","PETER THIEL","Motivayion",1999,450);

INSERT INTO BOOKS VALUES (4, "The life of pi","DAVITMAGEE","Motivation",2021,627);

INSERT INTO BOOKS VALUES (5, "Thamizhatrupadai","VAIRAMUTHU","Historical",2000,450);

SELECT * FROM BOOKS;

SELECT * FROM BOOKS WHERE TITLE = "Ponniyen selvan";

SELECT * FROM BOOKS WHERE TITLE = "Thamizhatrupadai";

UPDATE BOOKS SET PRICE = 900 WHERE TITLE = "Ponniyen selvan";

DELETE FROM BOOKS WHERE TITLE = "Ponniyen selvan";

The screenshot displays the MySQL Workbench interface. The top pane shows a series of SQL queries executed in a script. The bottom pane shows the results of these queries in a table format. The table has columns: ID, TITLE, AUTHOR, GENRE, PUBLICATION, and PRICE. The data rows are as follows:

ID	TITLE	AUTHOR	GENRE	PUBLICATION	PRICE
2	The gift of god	BRENE BROWN	Motivation	2000	720
3	zero to one	PETER THIEL	Motivayion	1999	450
4	The life of pi	DAVITMAGEE	Motivation	2021	627
5	Thamizhatrupadai	VAIRAMUTHU	Historical	2000	450

The bottom pane also shows the output of the DELETE query, indicating that 0 row(s) were affected.