SQL ASSIGMENT

Shah Manan

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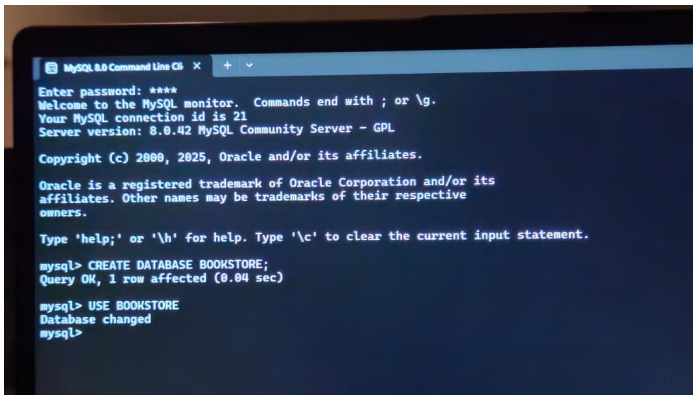
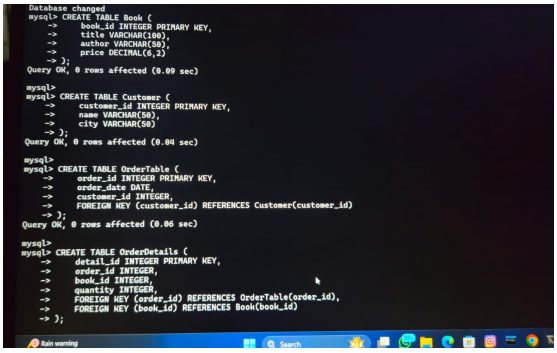
Problem 1: ONLINE BOOKSTORE MANAGEMENT

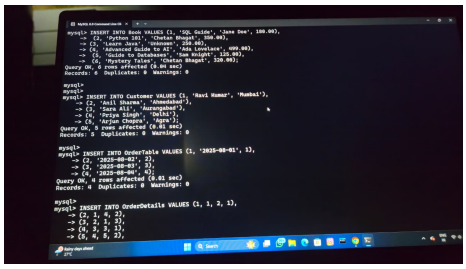
{STEP 0 : CREATE DATABASE AND USE DATABASE}



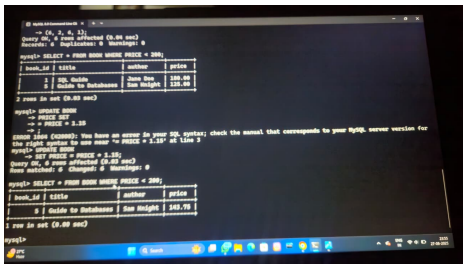
{step 1 : CREATE TABLES}



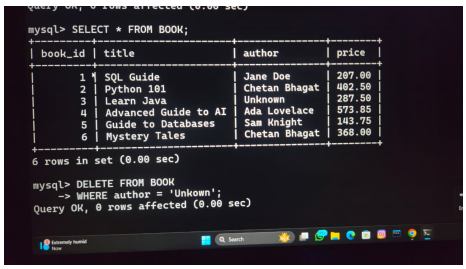
{STEP 2 : INSERT DATA}



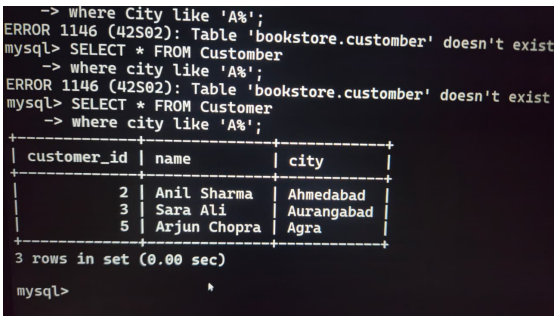
{STEP 3 : UPDATE PRICES OF BOOKS BELOW 200}



{STEP 4 DELETE ALL BOOK WRITTEN BY AN AUTHOR NAMED UNKNOWN}



{STEP 5 Display all customers whose city name starts with A}



```
   -> where City like 'A%';
ERROR 1146 (42S02): Table 'bookstore.customber' doesn't exist
mysql> SELECT * FROM Custombe
    -> where city like 'A%';
ERROR 1146 (42S02): Table 'bookstore.customber' doesn't exist
mysql> SELECT * FROM Customer
    -> where city like 'A%';
+-------------+--------------+-------------+
| customer_id | name         | city        |
+-------------+--------------+-------------+
|           2 | Anil Sharma  | Ahmedabad   |
|           3 | Sara Ali     | Aurangabad  |
|           5 | Arjun Chopra | Agra        |
+-------------+--------------+-------------+
3 rows in set (0.00 sec)

mysql>
```

H


```
   -> where City like 'A%';
ERROR 1146 (42S02): Table 'bookstore.customber' doesn't exist
mysql> SELECT * FROM Custombe
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+-------------+--------------+-------------+
|           2 | Anil Sharma  | Ahmedabad   |
|           3 | Sara Ali     | Aurangabad  |
|           5 | Arjun Chopra | Agra        |
+-------------+--------------+-------------+
3 rows in set (0.00 sec)

mysql>
```


{STEP 6 Find all books where the title contains the word Guide.}

STEP 7 Change the city of customer Ravi Kumar to Hyderabad

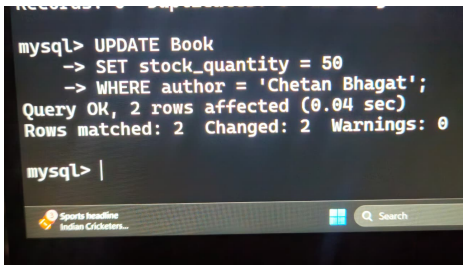
```
    -> WHERE TITLE LIKE 'Guide';
Empty set (0.00 sec)

mysql> UPDATE Customer
    -> SET city = 'Hyderabad'
    -> WHERE name = 'Ravi Kumar';
Query OK, 1 row affected (0.23 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT * FROM Book
    -> WHERE price BETWEEN 300 AND 500;
+---------+---------------+
| book_id | title         | author
```

STEP 8 List all books with price between 300 and 500

STEP 9 : Add a new column stock quantity to the Book table

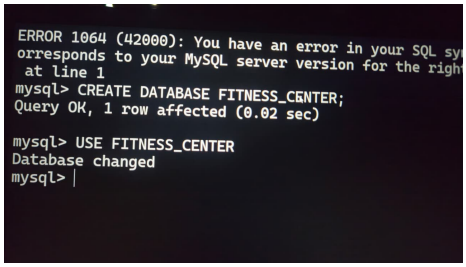
```
|       6 | Mystery Tales | Chetan Bhagat | 368
+---------+---------------+---------------+----
2 rows in set (0.02 sec)

mysql> ALTER TABLE Book
    -> ADD COLUMN stock_quantity INTEGER;
Query OK, 0 rows affected (0.07 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> UPDATE Book
    -> SET stock_quantity = 50
    -> WHERE author = 'Chetan Bhagat';
Query OK, 2 rows affected (0.04 sec)
```

STEP 10 : Update stock quantity to 50 for all books by author Chetan Bhagat

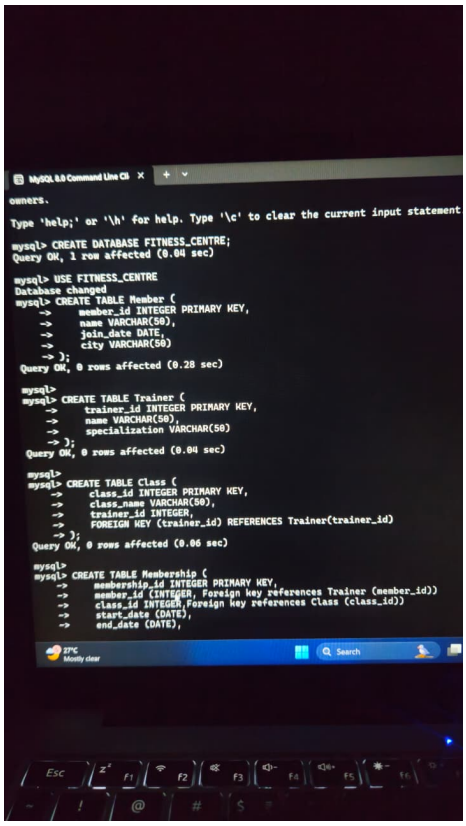


PROBLEM 2 FITNESS CENTER MEMBERSHIP

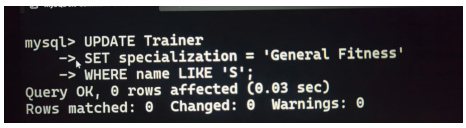
STEP 0 : CREATE DATABASE FITNESS_CENTER
0.1 : USE DATABASE



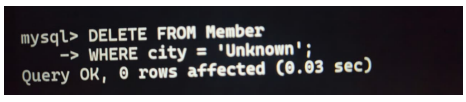
STEP 1 : CREATE TABLES



STEP 3 Update the specialization of trainers whose name starts with S to General



STEP 4 Delete all members whose city is Unknown



STEP 5 Display all classes where the class name contains Yoga

```
mysql> SELECT * FROM Class
    -> WHERE class_name LIKE 'Yoga';
Empty set (0.02 sec)
```

STEP 6 Change the city of member Anjali Sharma to Pune

```
mysql> UPDATE Member
    -> SET city = 'Pune'
    -> WHERE name = 'Anjali Sharma';
Query OK, 1 row affected (0.04 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

STEP 7 List all members who joined after 2024−01−01

```
mysql> SELECT * FROM Member
    -> WHERE join_date > '2024-01-01';
+-----------+---------------+------------+-----------+
| member_id | name          | join_date  | city      |
+-----------+---------------+------------+-----------+
|         1 | Anjali Sharma | 2024-03-15 | Pune      |
|         3 | Neha Patel    | 2024-05-22 | Ahmedabad |
|         4 | Amit Kumar    | 2025-01-05 | Chennai   |
|         6 | Vikram Verma  | 2024-07-30 | Hyderabad |
+-----------+---------------+------------+-----------+
4 rows in set (0.02 sec)
```

STEP 8 Add a new column monthly fee to the Class table

```
mysql> ALTER TABLE Class
    -> ADD COLUMN monthly_fee INTEGER;
Query OK, 0 rows affected (0.06 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

STEP 9 Set monthly fee to 2000 for all classes with Pilates in their name

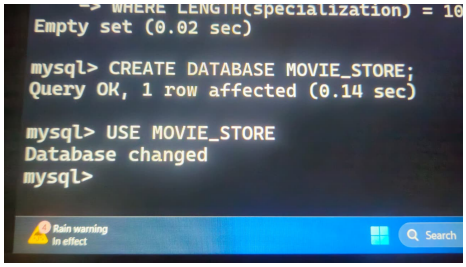
```
mysql> UPDATE Class
    -> SET monthly_fee = 2000
    -> WHERE class_name LIKE 'Pilates';
Query OK, 0 rows affected (0.00 sec)
Rows matched: 0  Changed: 0  Warnings: 0
```

STEP 10 Display all trainers whose specialization is exactly 10 characters long

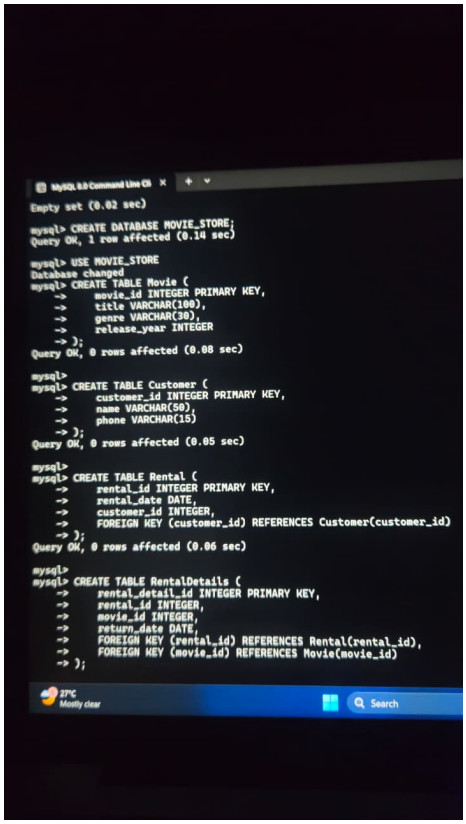
```
mysql> SELECT * FROM Trainer
    -> WHERE LENGTH(specialization) = 10;
Empty set (0.02 sec)
```

PROBLEM 3 : MOVIE RENTAL STORE

STEP 0 : CREATE DATABASE MOVIE_STORE
STEP 0.1 : USE DATABASE



STEP 1 : CREATE TABLE



STEP 3 Update the genre of all movies released before 2000 to Classic

```
mysql> UPDATE Movie
    -> SET genre = 'Classic'
    -> WHERE release_year < 2000;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

STEP 4 Delete movies whose title contains the word Test

```
mysql> DELETE FROM Movie
    -> WHERE title LIKE 'Test';
Query OK, 0 rows affected (0.00 sec)
```

STEP 5 Display all customers whose name ends with Patel

```
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT * FROM Customer
    -> WHERE name LIKE '%Patel';
+-------------+--------------+------------+
| customer_id | name         | phone      |
+-------------+--------------+------------+
|           2 | Pooja Patel  | 9876543210 |
|           4 | Neha Patel   | 7788996655 |
+-------------+--------------+------------+
2 rows in set (0.00 sec)
```

STEP 6 Find all movies released between 2010 and 2020

```
mysql> SELECT * FROM Customer
    -> WHERE name LIKE 'Patel';
Empty set (0.00 sec)

mysql> SELECT * FROM Movie
    -> WHERE release_year BETWEEN 2010 AND 2020;
+----------+-----------------+--------+--------------+
| movie_id | title           | genre  | release_year |
+----------+-----------------+--------+--------------+
|        1 | Fast Action     | Action |         2015 |
|        2 | Comedy Nights   | Comedy |         2018 |
|        4 | Thrill Action   | Action |         2020 |
|        6 | Romantic Comedy | Comedy |         2012 |
+----------+-----------------+--------+--------------+
```

STEP 8 List all movies where the genre contains Action

```
mysql> SELECT * FROM Movie
    -> WHERE genre LIKE 'Action';
+----------+---------------+--------+--------------+
| movie_id | title         | genre  | release_year |
+----------+---------------+--------+--------------+
|        1 | Fast Action   | Action |         2015 |
|        4 | Thrill Action | Action |         2020 |
+----------+---------------+--------+--------------+
```

STEP 9 Add a new column rental price to the Movie table
\end
\begin{figure}[H]
    \centering
    \includegraphics[width=0.5\linewidth]{3.9.jpg}
    \label{fig:placeholder}
\end{figure}

\begin{lstlisting}
STEP 10 Set rental price to 150 for all Comedy movies