**Tasks 1: Database Design:**

**1. Create the database named "TicketBookingSystem"**

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Description automatically generated

**2. Write SQL scripts to create the mentioned tables with appropriate data types, constraints, and relationships. • Venu • Event • Customers • Booking**

A screen shot of a computer code

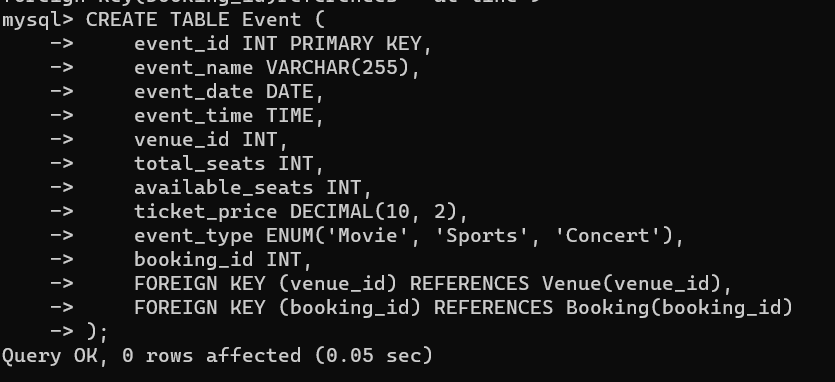
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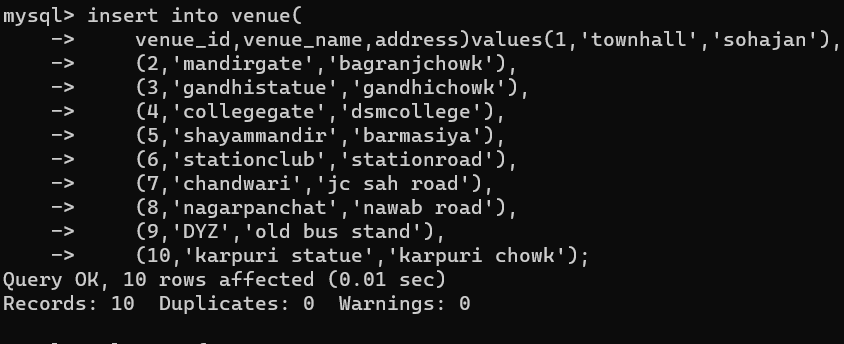


**3. Create an ERD (Entity Relationship Diagram) for the database**

**4. Create appropriate Primary Key and Foreign Key constraints for referential integrity**.

**Tasks 2: Select, Where, Between, AND, LIKE:**

1. **Write a SQL query to insert at least 10 sample records into each table**

****

**A screen shot of a computer

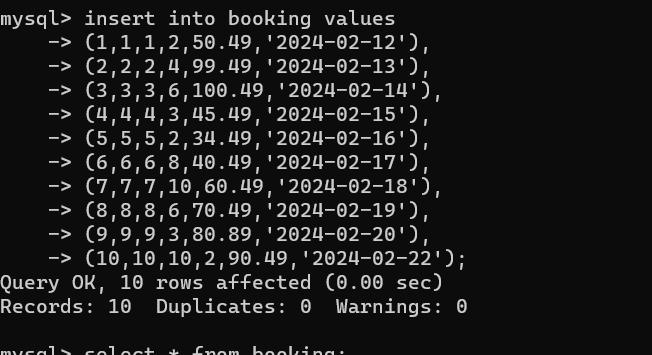
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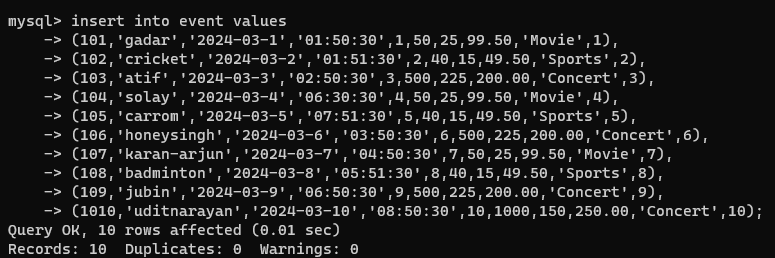
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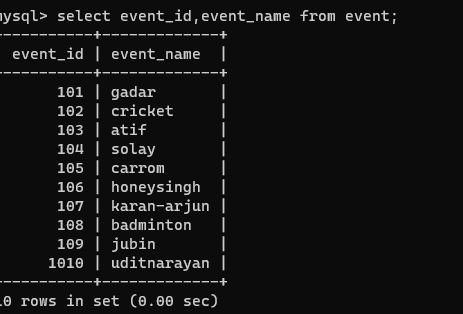
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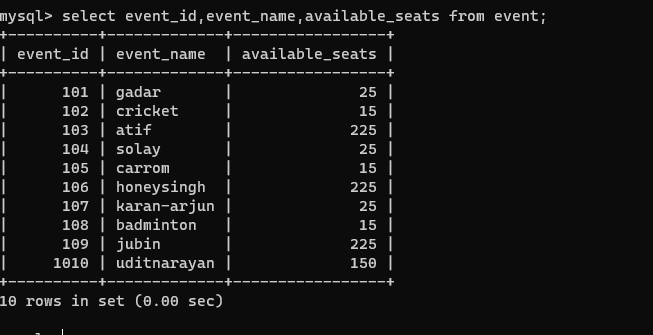
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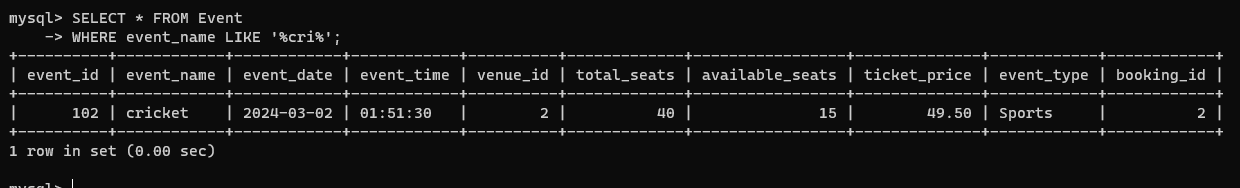
1. **Write a SQL query to list all Events.**

****

1. **Write a SQL query to select events with available tickets.**

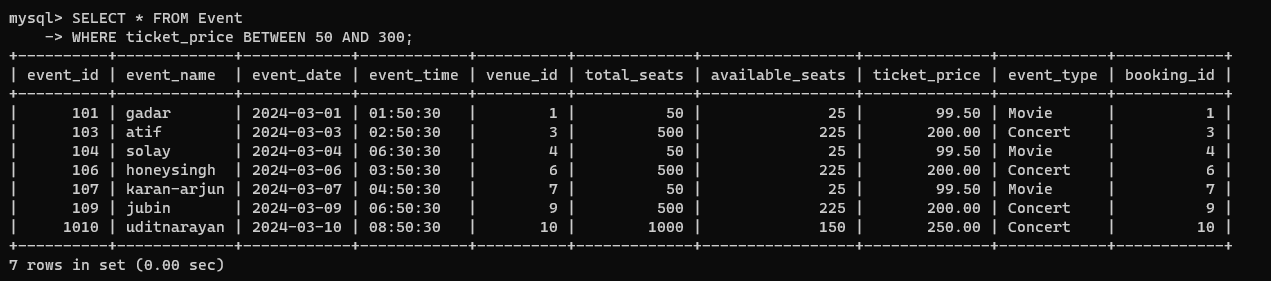
****

**4. Write a SQL query to select events name partial match with ‘cup’**

****

**5.Write a SQL query to select events with ticket price range is between 1000 to 2500.**

**I have taken range of price between 50 to 300…**

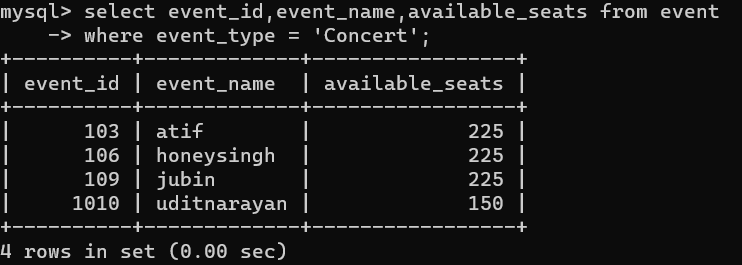
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**6. Write a SQL query to retrieve events with dates falling within a specific range.**

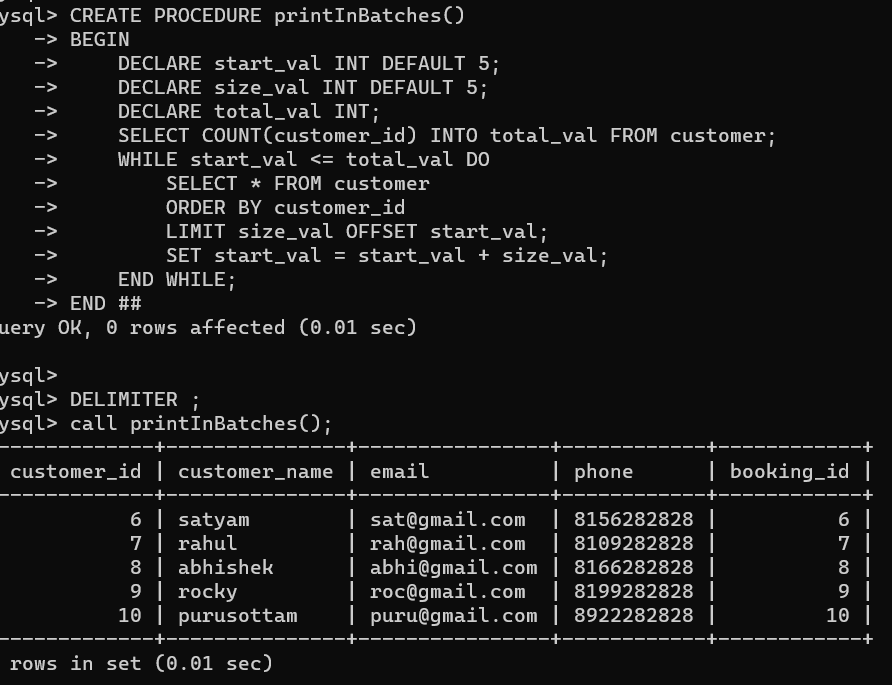
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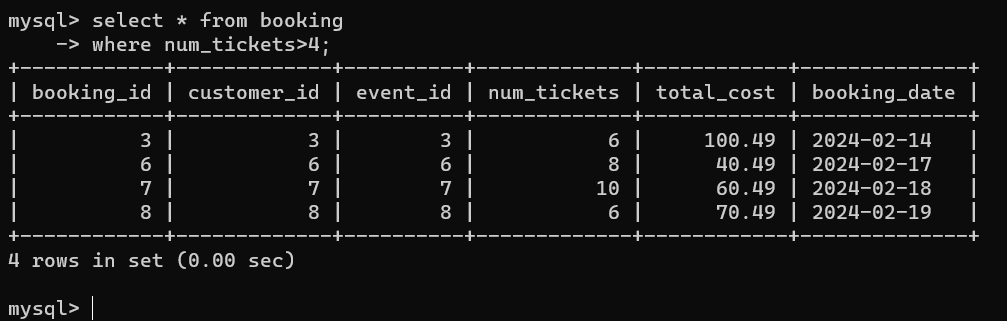
**7. Write a SQL query to retrieve events with available tickets that also have "Concert" in their name**.

****

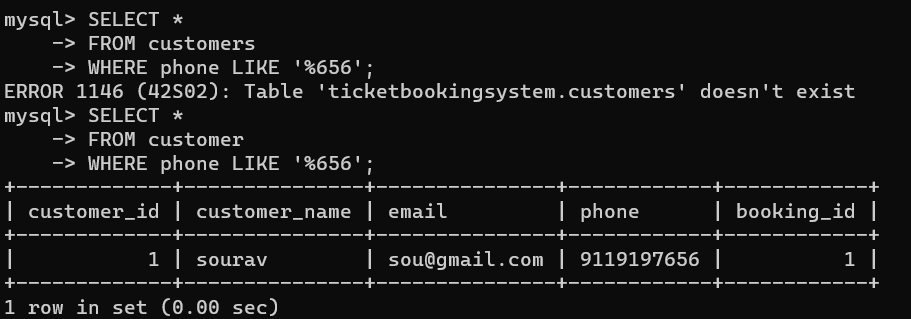
**8. Write a SQL query to retrieve users in batches of 5, starting from the 6th user**

****

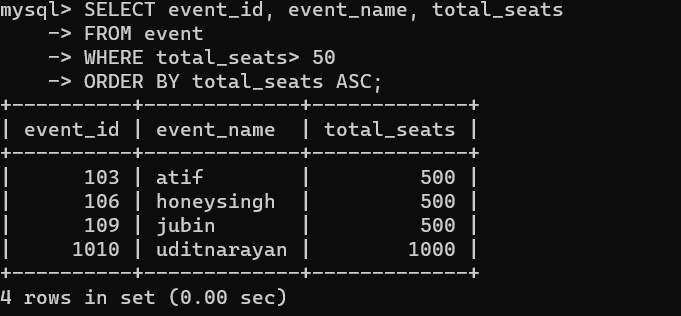
**9. Write a SQL query to retrieve bookings details contains booked no of ticket more than 4.**

****

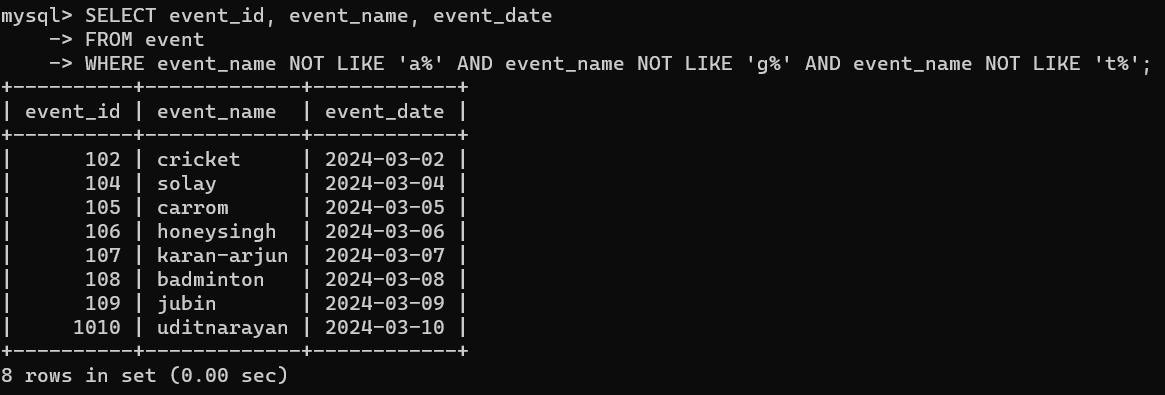
**10. Write a SQL query to retrieve customer information whose phone number end with ‘000’**

****

**11. Write a SQL query to retrieve the events in order whose seat capacity more than 15000.**

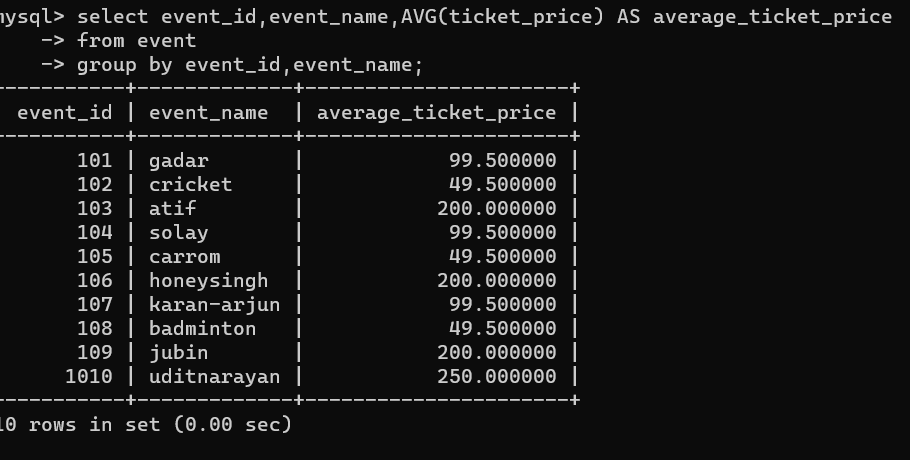
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**12. Write a SQL query to select events name not start with ‘x’, ‘y’, ‘z’**

****

**Tasks 3: Aggregate functions, Having, Order By, GroupBy and Joins:**

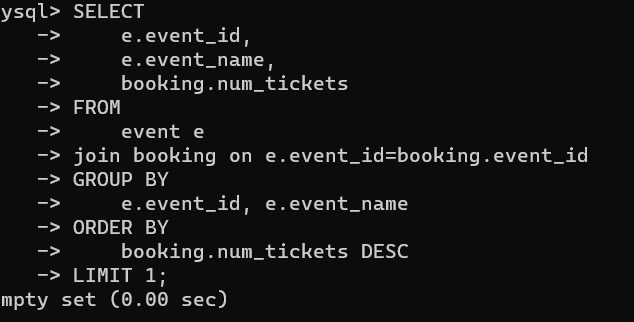
1. **Write a SQL query to List Events and Their Average Ticket Prices**

****

1. **Write a SQL query to Calculate the Total Revenue Generated by Events**

****

1. **Write a SQL query to find the event with the highest ticket sales**

****

1. **Write a SQL query to Calculate the Total Number of Tickets Sold for Each Event.**

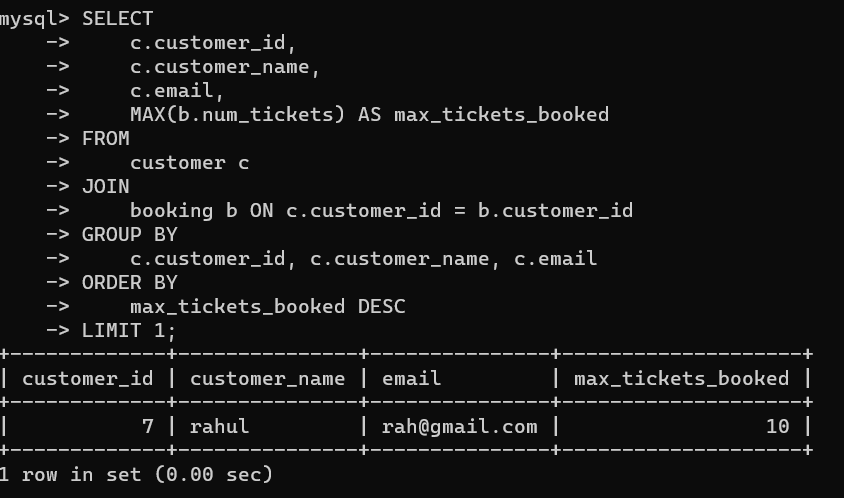
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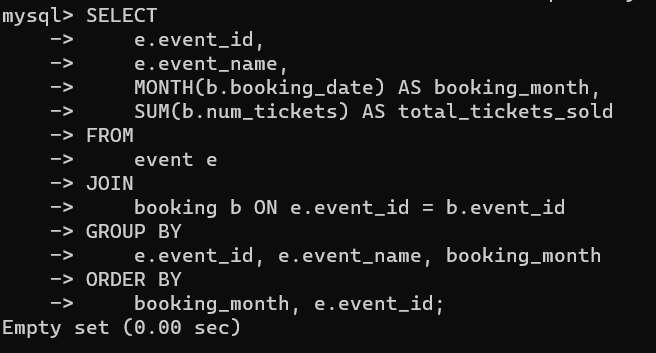
5. Write a SQL query to Find Events with No Ticket Sales.

****

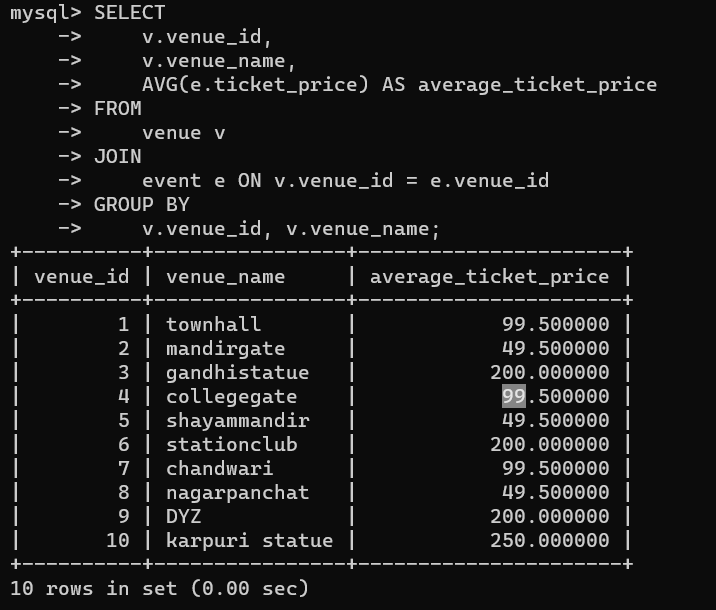
**6.Write a SQL query to Find the User Who Has Booked the Most Tickets**.

****

**7.Write a SQL query to List Events and the total number of tickets sold for each month**.



**8. Write a SQL query to calculate the average Ticket Price for Events in Each Venue.**

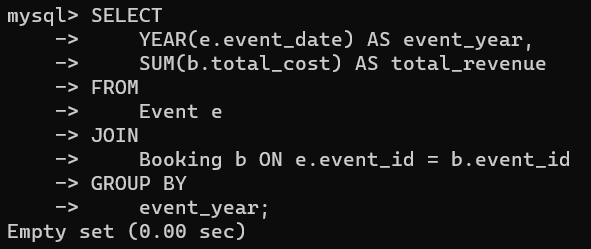
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**9. Write a SQL query to calculate the total Number of Tickets Sold for Each Event Type**

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**10. Write a SQL query to calculate the total Revenue Generated by Events in Each Year**.

****

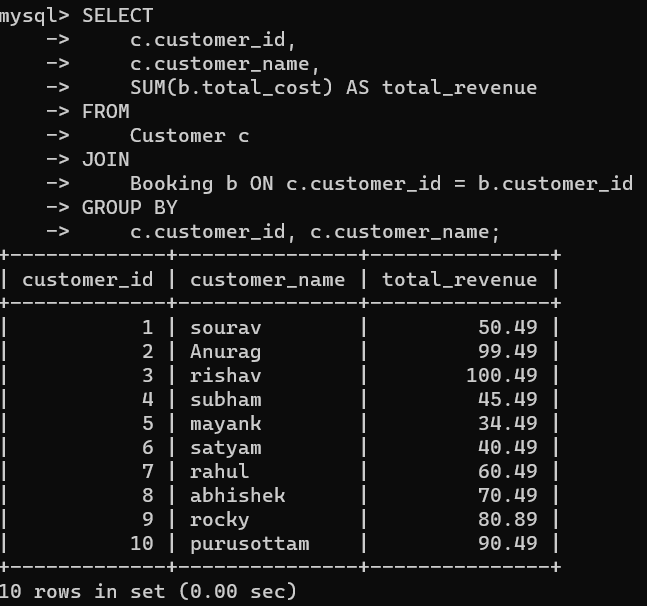
**11. Write a SQL query to list users who have booked tickets for multiple event**

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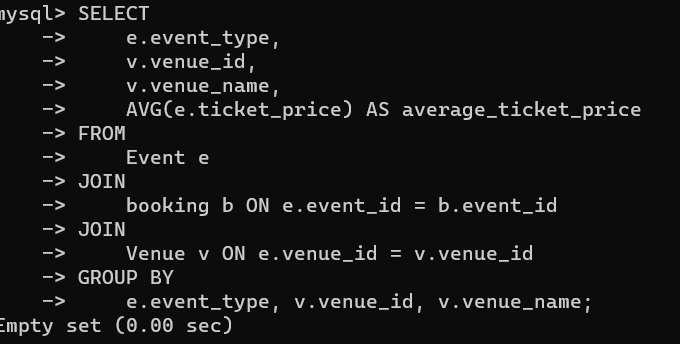
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**12. Write a SQL query to calculate the Total Revenue Generated by Events for Each**

**Costumer**

****

**13. Write a SQL query to calculate the Average Ticket Price for Events in Each Category and Venue.**

****

**14. Write a SQL query to list Users and the Total Number of Tickets They've Purchased in the Last 30 Days**

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**Tasks 4: Subquery and its types**

1. **Calculate the Average Ticket Price for Events in Each Venue Using a Subquery**

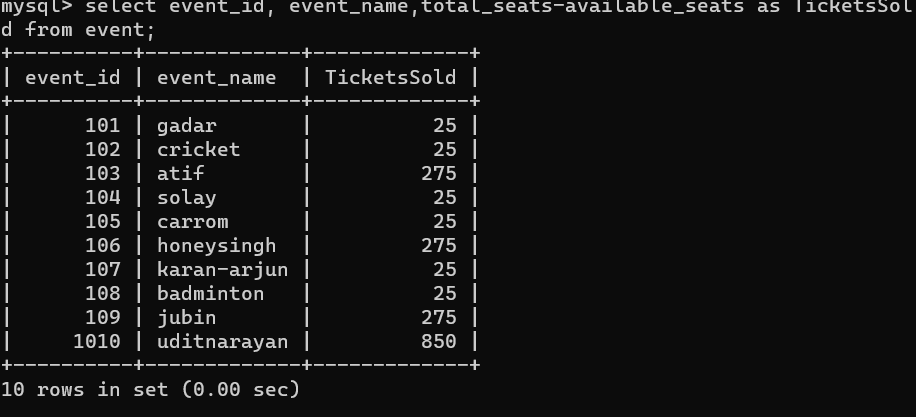
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1. **Find Events with More Than 50% of Tickets Sold using subquery.**

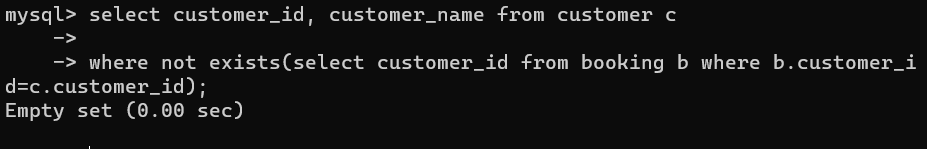
**A screen shot of a computer

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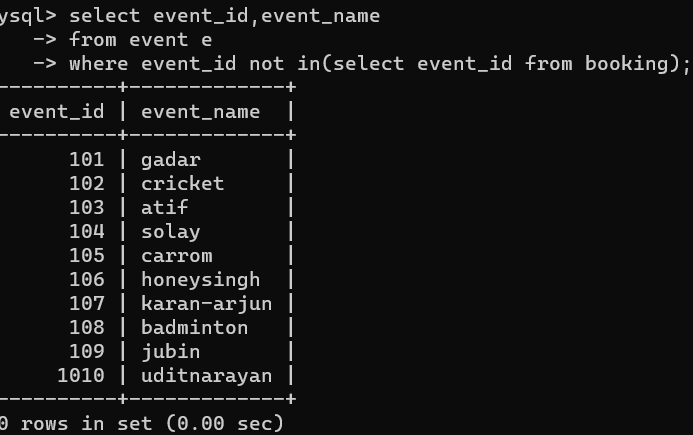
1. **Calculate the Total Number of Tickets Sold for Each Event.**

****

1. **Find Users Who Have Not Booked Any Tickets Using a NOT EXISTS Subquery.**

****

1. **List Events with No Ticket Sales Using a NOT IN Subquery.**

****

1. **Calculate the Total Number of Tickets Sold for Each Event Type Using a Subquery in the FROM Clause.**

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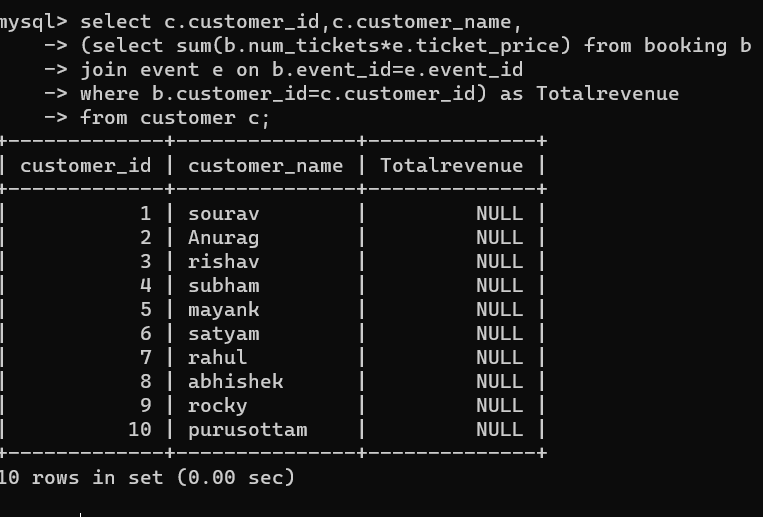
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1. **Find Events with Ticket Prices Higher Than the Average Ticket Price Using a Subquery in the WHERE Clause.**

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**8.Calculate the Total Revenue Generated by Events for Each User Using a Correlated Subquery.**

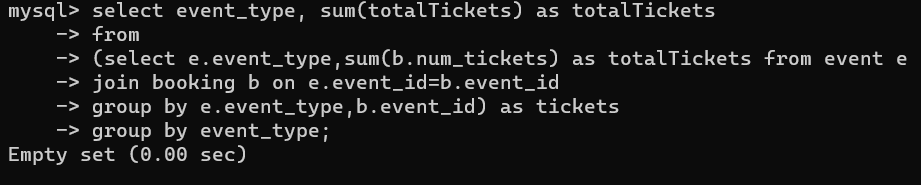
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**9List Users Who Have Booked Tickets for Events in a Given Venue Using a Subquery in the WHERE Clause**

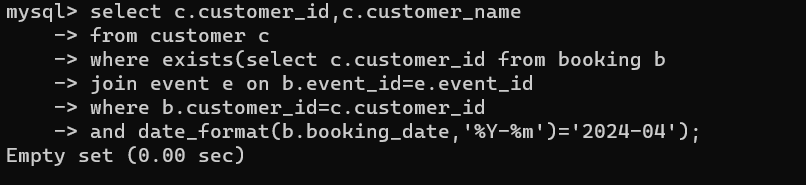
**A screen shot of a computer program

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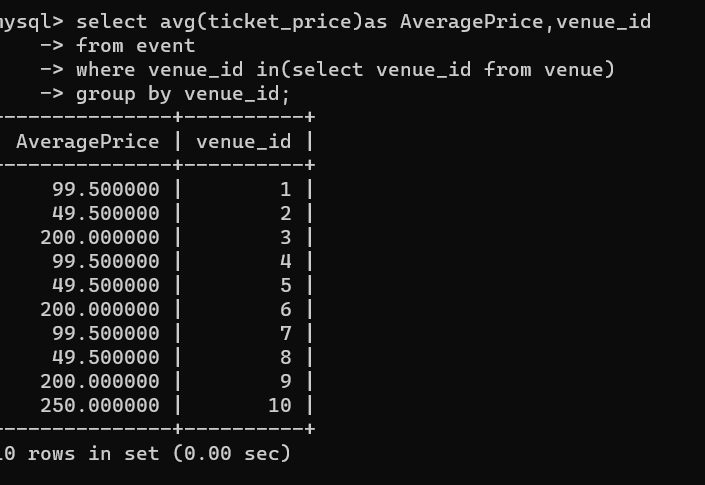
**10Calculate the Total Number of Tickets Sold for Each Event Category Using a Subquery with GROUP BY.**

****

**11. Find Users Who Have Booked Tickets for Events in each Month Using a Subquery with DATE\_FORMAT.**

****

**12. Calculate the Average Ticket Price for Events in Each Venue Using a Subquery**

****