```
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use project;
Database changed
mysql> CREATE DATABASE airline_reservation;
Query OK, 1 row affected (0.06 sec)

mysql> USE airline_reservation;
Database changed
mysql>
mysql> CREATE TABLE Flights (
    ->     FlightID INT PRIMARY KEY,
    ->     FlightNumber VARCHAR(10),
    ->     Origin VARCHAR(50),
    ->     Destination VARCHAR(50),
    ->     DepartureTime DATETIME,
    ->     ArrivalTime DATETIME
    -> );
Query OK, 0 rows affected (0.07 sec)

mysql>
mysql> CREATE TABLE Customers (
    ->     CustomerID INT PRIMARY KEY,
    ->     Name VARCHAR(100),
    ->     Email VARCHAR(100),
    ->     Phone VARCHAR(15)
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql>
mysql> CREATE TABLE Bookings (
    ->     BookingID INT PRIMARY KEY,
    ->     CustomerID INT,
    ->     FlightID INT,
    ->     BookingDate DATE,
    ->     Status VARCHAR(20) DEFAULT 'Confirmed',
    ->     FOREIGN KEY (CustomerID) REFERENCES Customers(CustomerID),
    ->     FOREIGN KEY (FlightID) REFERENCES Flights(FlightID)
    -> );
Query OK, 0 rows affected (0.09 sec)
```
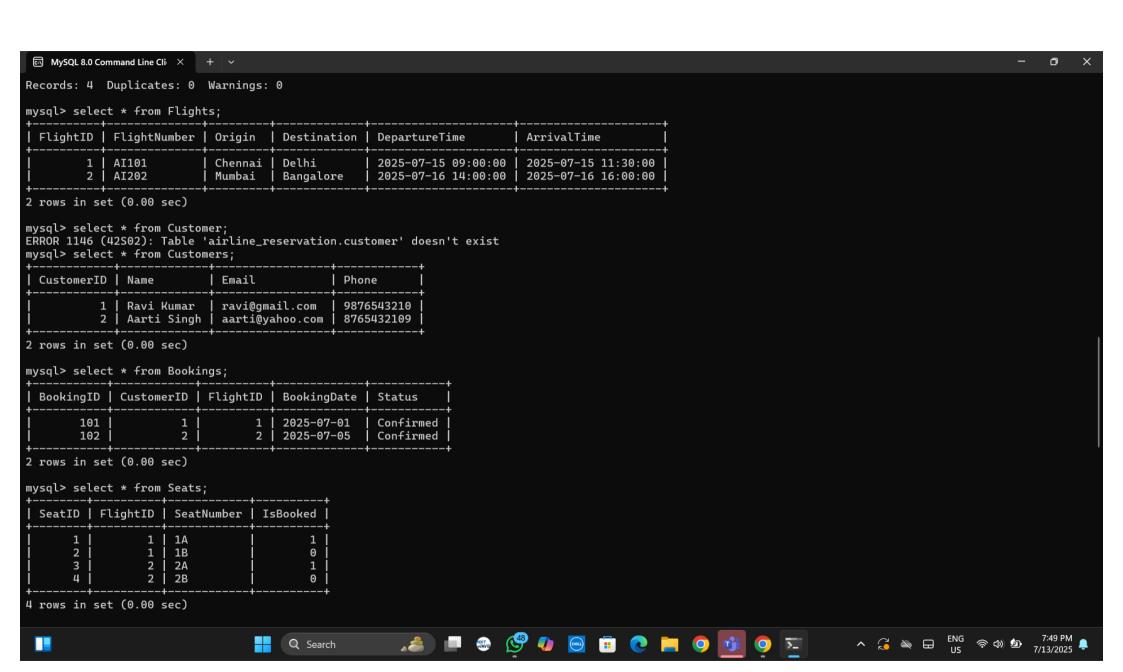
```
mysql>
mysql> CREATE TABLE Seats (
    ->     SeatID INT PRIMARY KEY,
    ->     FlightID INT,
    ->     SeatNumber VARCHAR(5),
    ->     IsBooked BOOLEAN DEFAULT FALSE,
    ->     FOREIGN KEY (FlightID) REFERENCES Flights(FlightID)
    -> );
Query OK, 0 rows affected (0.07 sec)

mysql> INSERT INTO Flights VALUES
    -> (1, 'AI101', 'Chennai', 'Delhi', '2025-07-15 09:00:00', '2025-07-15 11:30:00'),
    -> (2, 'AI202', 'Mumbai', 'Bangalore', '2025-07-16 14:00:00', '2025-07-16 16:00:00');
Query OK, 2 rows affected (0.01 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql>
mysql> INSERT INTO Customers VALUES
    -> (1, 'Ravi Kumar', 'ravi@gmail.com', '9876543210'),
    -> (2, 'Aarti Singh', 'aarti@yahoo.com', '8765432109');
Query OK, 2 rows affected (0.01 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql>
mysql> INSERT INTO Bookings VALUES
    -> (101, 1, 1, '2025-07-01', 'Confirmed'),
    -> (102, 2, 2, '2025-07-05', 'Confirmed');
Query OK, 2 rows affected (0.01 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql>
mysql> INSERT INTO Seats VALUES
    -> (1, 1, '1A', TRUE),
    -> (2, 1, '1B', FALSE),
    -> (3, 2, '2A', TRUE),
    -> (4, 2, '2B', FALSE);
Query OK, 4 rows affected (0.01 sec)
Records: 4  Duplicates: 0  Warnings: 0

mysql> select * from Flights;
```

```
Records: 4  Duplicates: 0  Warnings: 0

mysql> select * from Flights;
+----------+--------------+---------+-------------+---------------------+---------------------+
| FlightID | FlightNumber | Origin  | Destination | DepartureTime       | ArrivalTime         |
+----------+--------------+---------+-------------+---------------------+---------------------+
|        1 | AI101        | Chennai | Delhi       | 2025-07-15 09:00:00 | 2025-07-15 11:30:00 |
|        2 | AI202        | Mumbai  | Bangalore   | 2025-07-16 14:00:00 | 2025-07-16 16:00:00 |
+----------+--------------+---------+-------------+---------------------+---------------------+
2 rows in set (0.00 sec)

mysql> select * from Customer;
ERROR 1146 (42S02): Table 'airline_reservation.customer' doesn't exist
mysql> select * from Customers;
+------------+-------------+-----------------+------------+
| CustomerID | Name        | Email           | Phone      |
+------------+-------------+-----------------+------------+
|          1 | Ravi Kumar  | ravi@gmail.com  | 9876543210 |
|          2 | Aarti Singh | aarti@yahoo.com | 8765432109 |
+------------+-------------+-----------------+------------+
2 rows in set (0.00 sec)

mysql> select * from Bookings;
+-----------+------------+----------+-------------+-----------+
| BookingID | CustomerID | FlightID | BookingDate | Status    |
+-----------+------------+----------+-------------+-----------+
|       101 |          1 |        1 | 2025-07-01  | Confirmed |
|       102 |          2 |        2 | 2025-07-05  | Confirmed |
+-----------+------------+----------+-------------+-----------+
2 rows in set (0.00 sec)

mysql> select * from Seats;
+--------+----------+------------+----------+
| SeatID | FlightID | SeatNumber | IsBooked |
+--------+----------+------------+----------+
|      1 |        1 | 1A         |        1 |
|      2 |        1 | 1B         |        0 |
|      3 |        2 | 2A         |        1 |
|      4 |        2 | 2B         |        0 |
+--------+----------+------------+----------+
4 rows in set (0.00 sec)
```

```
4 rows in set (0.00 sec)

mysql> -- 1. Available seats for a flight
mysql> SELECT SeatNumber FROM Seats
    -> WHERE FlightID = 1 AND IsBooked = FALSE;
+------------+
| SeatNumber |
+------------+
| 1B         |
+------------+
1 row in set (0.01 sec)

mysql>
mysql> -- 2. Flight search from origin to destination
mysql> SELECT * FROM Flights
    -> WHERE Origin = 'Chennai' AND Destination = 'Delhi';
+----------+--------------+---------+-------------+---------------------+---------------------+
| FlightID | FlightNumber | Origin  | Destination | DepartureTime       | ArrivalTime         |
+----------+--------------+---------+-------------+---------------------+---------------------+
|        1 | AI101        | Chennai | Delhi       | 2025-07-15 09:00:00 | 2025-07-15 11:30:00 |
+----------+--------------+---------+-------------+---------------------+---------------------+
1 row in set (0.00 sec)

mysql>
mysql> -- 3. Booking Summary Report
mysql> SELECT b.BookingID, c.Name, f.FlightNumber, b.BookingDate, b.Status
    -> FROM Bookings b
    -> JOIN Customers c ON b.CustomerID = c.CustomerID
    -> JOIN Flights f ON b.FlightID = f.FlightID;
+-----------+-------------+--------------+-------------+-----------+
| BookingID | Name        | FlightNumber | BookingDate | Status    |
+-----------+-------------+--------------+-------------+-----------+
|       101 | Ravi Kumar  | AI101        | 2025-07-01  | Confirmed |
|       102 | Aarti Singh | AI202        | 2025-07-05  | Confirmed |
+-----------+-------------+--------------+-------------+-----------+
2 rows in set (0.01 sec)

mysql> DELIMITER //
mysql>
mysql> CREATE TRIGGER after_booking_cancel
    -> AFTER UPDATE ON Bookings
```

```
|        1 | AI101         | Chennai | Delhi         | 2025-07-15 09:00:00 | 2025-07-15 11:30:00 |
+----------+---------------+---------+---------------+---------------------+---------------------+
1 row in set (0.00 sec)

mysql>
mysql> -- 3. Booking Summary Report
mysql> SELECT b.BookingID, c.Name, f.FlightNumber, b.BookingDate, b.Status
    -> FROM Bookings b
    -> JOIN Customers c ON b.CustomerID = c.CustomerID
    -> JOIN Flights f ON b.FlightID = f.FlightID;
+-----------+--------------+--------------+--------------+-----------+
| BookingID | Name         | FlightNumber | BookingDate  | Status    |
+-----------+--------------+--------------+--------------+-----------+
|       101 | Ravi Kumar   | AI101        | 2025-07-01   | Confirmed |
|       102 | Aarti Singh  | AI202        | 2025-07-05   | Confirmed |
+-----------+--------------+--------------+--------------+-----------+
2 rows in set (0.01 sec)

mysql> DELIMITER //
mysql>
mysql> CREATE TRIGGER after_booking_cancel
    -> AFTER UPDATE ON Bookings
    -> FOR EACH ROW
    -> BEGIN
    ->     IF NEW.Status = 'Cancelled' THEN
    ->         UPDATE Seats
    ->         SET IsBooked = FALSE
    ->         WHERE FlightID = NEW.FlightID
    ->         AND SeatID IN (
    ->             SELECT SeatID FROM Seats WHERE FlightID = NEW.FlightID LIMIT 1
    ->         );
    ->     END IF;
    -> END;
    -> //
ERROR 1235 (42000): This version of MySQL doesn't yet support 'LIMIT & IN/ALL/ANY/SOME subquery'
mysql> DELIMITER ;
mysql>
```