Testing Queries

Admin-Basic Queries

1. Add an aircraft with the following information: N112US Airbus A320-214 220 US 12 AA
2. Add an aircraft with the following information: N112US Airbus A320-214 220 US 12 AA
3. Change the seat number for the passenger with booking ID 1198303 to 12A.
4. Change the seat number for the passenger with booking ID 1198303 to 12A.
5. Delete all flights where the departure airport is DCA and the arrival airport is CLT.
6. Delete passenger information for a passenger whose gender is M, age is 62, and nationality is RU.

Admin-Advanced Queries

1. Calculates the number of flights from DCA to CLT by each airline, providing insights into flight frequencies and airline operations.

SELECT airline, COUNT(\*) AS number\_of\_flights

FROM flight

WHERE departure\_airport = 'DCA' AND arrival\_airport = 'CLT'

GROUP BY airline;

1. Finds how many passengers of each nationality and age group are flying, which can help in demographic analysis.

SELECT nationality, age, COUNT(\*) AS total\_passengers

FROM passenger

GROUP BY nationality, age;

1. Calculates the average age of passengers on a specific flight, which might be useful for understanding the demographic targeting of different routes.

SELECT f.flight\_id, AVG(p.age) AS average\_age

FROM flight f

JOIN booking b ON f.flightID = b.flightID

JOIN passenger p ON b.passengerID = p.passengerID

GROUP BY f.flightID;

1. Assesses aircraft utilization by counting the number of flights each aircraft has completed.

SELECT a.IATACode, a.PlaneModel, COUNT(f.flightID) AS number\_of\_flights

FROM plane a

JOIN flight f ON a.PlaneID = f.PlaneID

GROUP BY a.PlaneID, f.PlaneID;

1. Track changes in seat assignments for passengers, useful for analyzing seating preferences or changes due to operational reasons.

SELECT b.BookingID, b.seatID, p.FirstName, p.LastName

FROM booking b

JOIN Passengers p ON b.passengerID = p.passengerID

WHERE b.bookingID= 1198303;

1. Track how often aircraft are reassigned to different airlines, which can be indicative of leasing patterns or fleet management practices.

SELECT a.PlaneID, a.airline, COUNT(\*) AS times\_changed

FROM plane a

GROUP BY a.PlaneID, a.airline;