Screenshot 1 — SQL query editor:

```sql
-- 17. Update airplane seat capacity +20 where capacity < 150
UPDATE Airplane
SET total_seats = total_seats + 20
WHERE total_seats < 150;

-- 18. Delete canceled flight legs (example: available_seats = 0)
DELETE FROM Leg_Instance
WHERE available_seats = 0;

-------------------------
    --Join TASKS--
-------------------------
SELECT fl.leg_no,
       li.departure_time,
       li.arrival_time,
       a.type_name AS airplane_name
FROM Flight_Leg fl
JOIN Leg_Instance li ON fl.leg_no = li.leg_no
JOIN Flight_Leg_Assignment fla ON fl.leg_no = fla.leg_no
JOIN Flight f ON fla.flight_no = f.flight_no
JOIN Airplane a ON a.airplane_id = 1; -- replace 1 with actual mapping if available
```

Results:

	leg_no	departure_time	arrival_time	airplane_name
1	101	08:05:00.0000000	12:05:00.0000000	Boeing 737
2	102	14:10:00.0000000	16:10:00.0000000	Boeing 737
3	103	09:05:00.0000000	11:05:00.0000000	Boeing 737

Query executed successfully.

Screenshot 2 — SQL query editor:

```sql
-------------------------
    --Join TASKS--
-------------------------
SELECT fl.leg_no,
       li.departure_time,
       li.arrival_time,
       a.type_name AS airplane_name
FROM Flight_Leg fl
JOIN Leg_Instance li ON fl.leg_no = li.leg_no
JOIN Flight_Leg_Assignment fla ON fl.leg_no = fla.leg_no
JOIN Flight f ON fla.flight_no = f.flight_no
JOIN Airplane a ON a.airplane_id = 1; -- replace 1 with actual mapping if available

SELECT f.flight_no,
       dep.name AS departure_airport,
       arr.name AS arrival_airport
FROM Flight f
JOIN Flight_Leg_Assignment fla ON f.flight_no = fla.flight_no
JOIN Flight_Leg fl ON fla.leg_no = fl.leg_no
JOIN Airport dep ON fl.dep_airport_code = dep.airport_code
JOIN Airport arr ON fl.arr_airport_code = arr.airport_code;
```

Results:

	flight_no	departure_airport	arrival_airport
1	FL100	Cairo International Airport	Dubai International Airport
2	FL200	Dubai International Airport	King Abdulaziz Airport
3	FL300	Cairo International Airport	King Abdulaziz Airport

Query executed successfully.

Screenshot 1:

```sql
-----------------------
    --Join TASKS--
-----------------------
SELECT fl.leg_no,
       li.departure_time,
       li.arrival_time,
       a.type_name AS airplane_name
FROM Flight_Leg fl
JOIN Leg_Instance li ON fl.leg_no = li.leg_no
JOIN Flight_Leg_Assignment fla ON fl.leg_no = fla.leg_no
JOIN Flight f ON fla.flight_no = f.flight_no
JOIN Airplane a ON a.airplane_id = 1; -- replace 1 with actual mapping if available

SELECT f.flight_no,
       dep.name AS departure_airport,
       arr.name AS arrival_airport
FROM Flight f
JOIN Flight_Leg_Assignment fla ON f.flight_no = fla.flight_no
JOIN Flight_Leg fl ON fla.leg_no = fl.leg_no
JOIN Airport dep ON fl.dep_airport_code = dep.airport_code
JOIN Airport arr ON fl.arr_airport_code = arr.airport_code;

SELECT r.reservation_id,
       r.passenger_name,
       r.phone_no,
       r.leg_no,
       r.flight_date
FROM Reservation r;
```
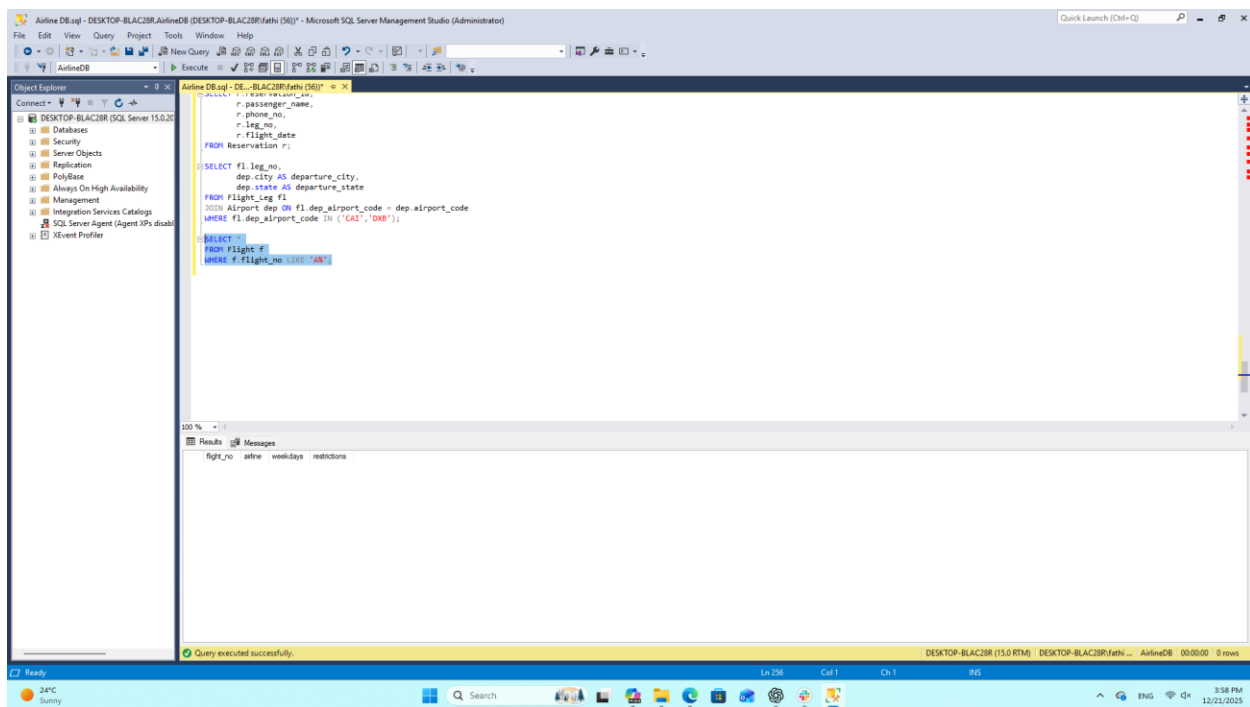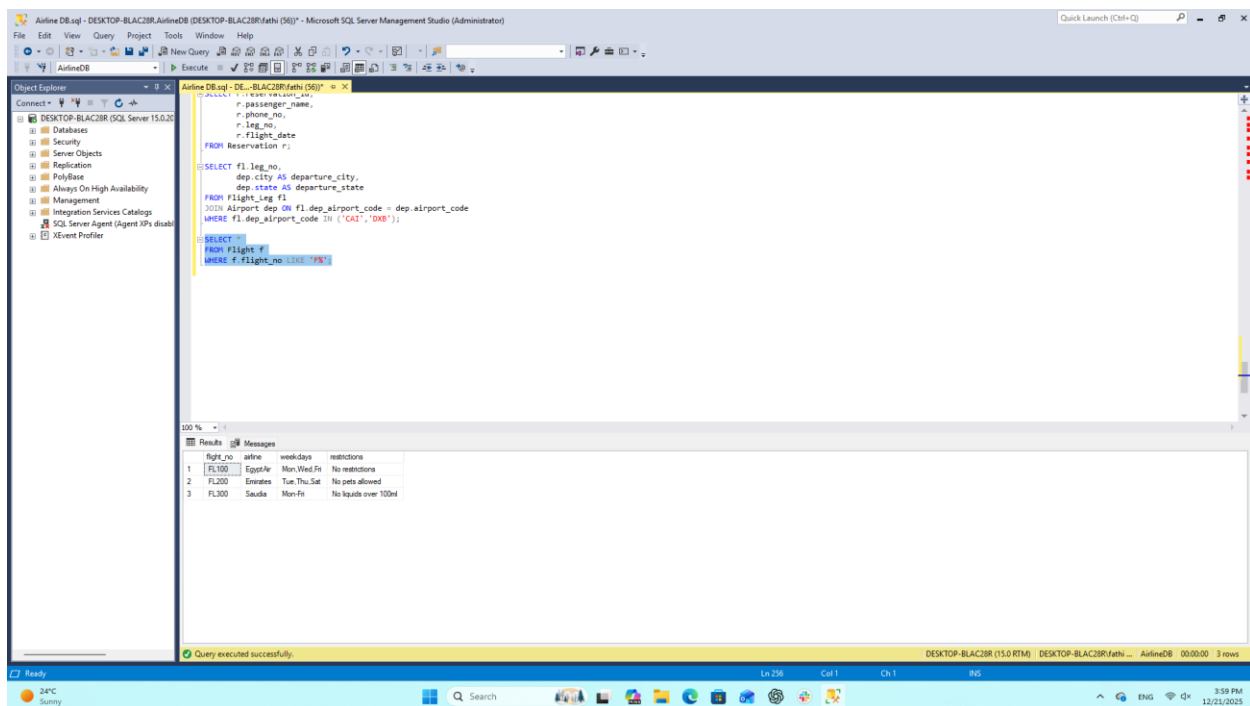
Results:

	reservation_id	passenger_name	phone_no	leg_no	flight_date
1	1	Ali Ahmed	+201234567890	101	2025-06-10
2	2	Fatima Saleh	+971501234567	102	2025-06-10
3	3	Hassan Omar	+966501234567	103	2025-06-11
4	4	Sara Hassan	NULL	101	2025-06-10

Query executed successfully.

Screenshot 2:

```sql
JOIN Airplane a ON a.airplane_id = 1; -- replace 1 with actual mapping if available

SELECT f.flight_no,
       dep.name AS departure_airport,
       arr.name AS arrival_airport
FROM Flight f
JOIN Flight_Leg_Assignment fla ON f.flight_no = fla.flight_no
JOIN Flight_Leg fl ON fla.leg_no = fl.leg_no
JOIN Airport dep ON fl.dep_airport_code = dep.airport_code
JOIN Airport arr ON fl.arr_airport_code = arr.airport_code;

SELECT r.reservation_id,
       r.passenger_name,
       r.phone_no,
       r.leg_no,
       r.flight_date
FROM Reservation r;

SELECT fl.leg_no,
       dep.city AS departure_city,
       dep.state AS departure_state
FROM Flight_Leg fl
JOIN Airport dep ON fl.dep_airport_code = dep.airport_code
WHERE fl.dep_airport_code IN ('CAI','DXB');
```

Results:

	leg_no	departure_city	departure_state
1	101	Cairo	Egypt
2	102	Dubai	UAE
3	103	Cairo	Egypt
4	104	Cairo	Egypt

Query executed successfully.

This question comes empty. But I write another letter 'F'.

Also this question I use another value available in my table.

```sql
FROM Reservation r
JOIN Fare f ON r.leg_no = f.leg_no
GROUP BY r.passenger_name
HAVING SUM(f.amount) BETWEEN 400 AND 700;

USE AirlineDB;

SELECT r.passenger_name,
       r.phone_no,
       r.leg_no,
       r.flight_date
FROM Reservation r
JOIN Flight_Leg_Assignment fla
    ON r.leg_no = fla.leg_no
WHERE fla.flight_no = 'FL100';

-- Not possible to identify booking agents
-- Agent data is not stored in the database
SELECT passenger_name
FROM Reservation
```

Results:

	passenger_name
1	Ali Ahmed
2	Fatima Saleh
3	Hassan Omar
4	Sara Hassan


```sql
FROM Reservation r
JOIN Fare f ON r.leg_no = f.leg_no
GROUP BY r.passenger_name
HAVING SUM(f.amount) BETWEEN 400 AND 700;

USE AirlineDB;

SELECT r.passenger_name,
       r.phone_no,
       r.leg_no,
       r.flight_date
FROM Reservation r
JOIN Flight_Leg_Assignment fla
    ON r.leg_no = fla.leg_no
WHERE fla.flight_no = 'FL100';

-- Not possible to identify booking agents
-- Agent data is not stored in the database
SELECT passenger_name
FROM Reservation;

SELECT r.passenger_name,
       fla.flight_no,
       r.flight_date
FROM Reservation r
JOIN Flight_Leg_Assignment fla ON r.leg_no = fla.leg_no
ORDER BY r.flight_date
```

Results:

	passenger_name	flight_no	flight_date
1	Ali Ahmed	FL100	2025-06-10
2	Fatima Saleh	FL200	2025-06-10
3	Sara Hassan	FL100	2025-06-10
4	Hassan Omar	FL300	2025-06-11

11.Display all staff members who are assigned as supervisors for flights.

I dont have Staff table.