

Microsoft SQL Server Management Studio (Administrator)

Object Explorer: DESKTOP-BLAC2BR (SQL Server 15.0.0)

Query Editor: AirlineDB - DE...BLAC2BR/fahs (56)*

```

-- 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 TADSS--
SELECT fl leg_no,
       li departure_time,
       li arrival_time,
       a.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 fl.flight_no = f.flight_no
JOIN Airplane a ON a.airplane_id = 1; -- replace 1 with actual mapping if available

```

Results: 3 rows

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

Query executed successfully.

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```

--Join TADSS--
SELECT fl leg_no,
       li departure_time,
       li arrival_time,
       a.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 fl.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: 3 rows

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

Query executed successfully.

Microsoft SQL Server Management Studio (Administrator) window showing a query execution in the 'AirlineDB' database. The query is a complex join involving tables: flight, flight_leg, flight_leg_assignment, flight_dep, flight_arr, airport, and reservation. The results table shows 4 rows of data.

```
--Join TASK5--
SELECT fl leg_no,
       li departure_time,
       li arrival_time,
       a.type_name AS airplane_name
FROM flight_leg fl
301IN flight_leg_assignment li ON fl leg_no = li leg_no
301IN flight_leg_assignment fla ON fl leg_no = fla leg_no
301IN flight_dep ON fla flight_no = f flight_no
301IN 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
301IN flight_leg_assignment fla ON f flight_no = fla flight_no
301IN flight_leg fl ON fla leg_no = f leg_no
301IN airport dep ON fl dep_airport_code = dep airport_code
301IN 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;

--Join TASK6--
SELECT f flight_no,
       dep.city AS departure_city,
       dep.state AS departure_state
FROM flight_leg fl
301IN airport dep ON fl dep_airport_code = dep airport_code
WHERE fl dep_airport_code IN ('CAI','DXB');
```

reservation_id	passenger_name	phone_no	leg_no	flight_date
1	Ahmed	+201234567890	101	2025-06-10
2	Fatma Saleh	+971501234567	102	2025-06-10
3	Hassan Omar	+96501234567	103	2025-06-11
4	Sara Hassan	NULL	101	2025-06-10

Query executed successfully. Desktop status: 24°C Sunny, 3:55 PM, 12/21/2025.

Microsoft SQL Server Management Studio (Administrator) window showing a query execution in the 'AirlineDB' database. The query is a complex join involving tables: flight, flight_leg, flight_leg_assignment, flight_dep, flight_arr, airport, and reservation. The results table shows 4 rows of data.

```
--Join TASK5--
SELECT f flight_no,
       dep.name AS departure_airport,
       arr.name AS arrival_airport
FROM flight f
301IN flight_leg_assignment li ON fl leg_no = li leg_no
301IN flight_leg_assignment fla ON fl leg_no = fla leg_no
301IN flight_dep ON fla flight_no = f flight_no
301IN airplane a ON a.airplane_id = 1; -- replace 1 with actual mapping if available

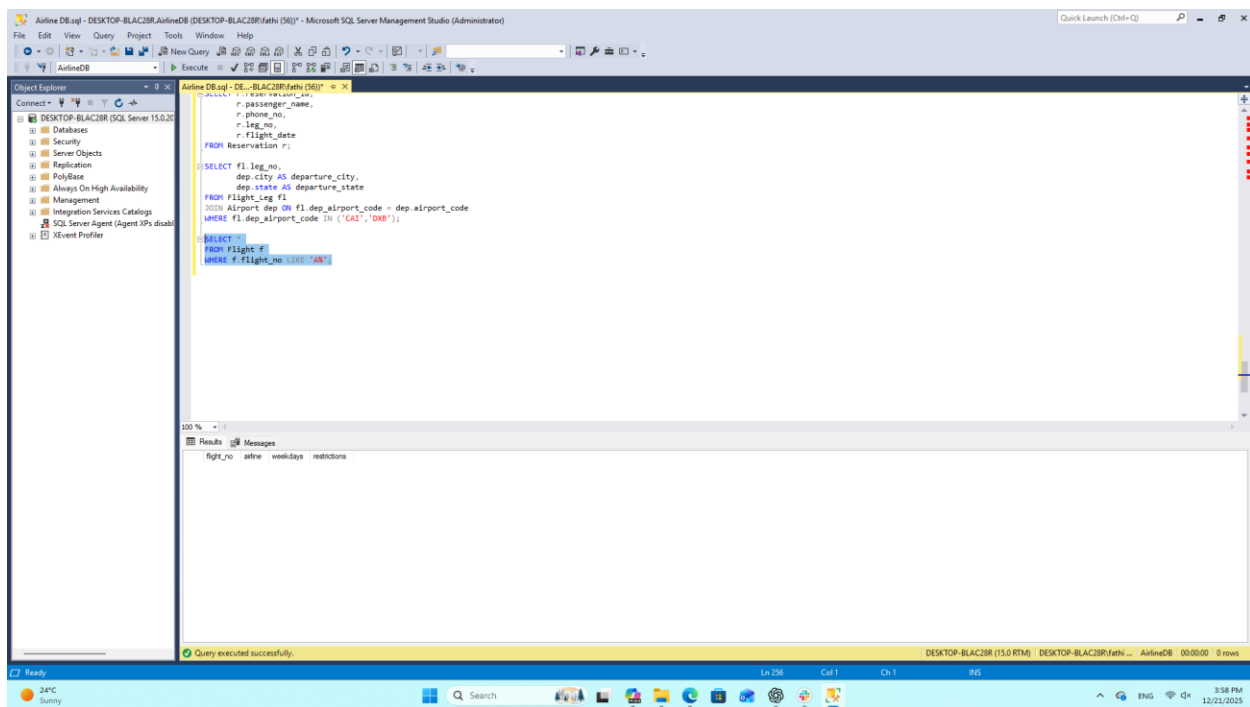
SELECT f flight_no,
       dep.name AS departure_airport,
       arr.name AS arrival_airport
FROM flight f
301IN flight_leg_assignment fla ON f flight_no = fla flight_no
301IN flight_leg fl ON fla leg_no = f leg_no
301IN airport dep ON fl dep_airport_code = dep airport_code
301IN airport arr ON fl arr_airport_code = arr airport_code;

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

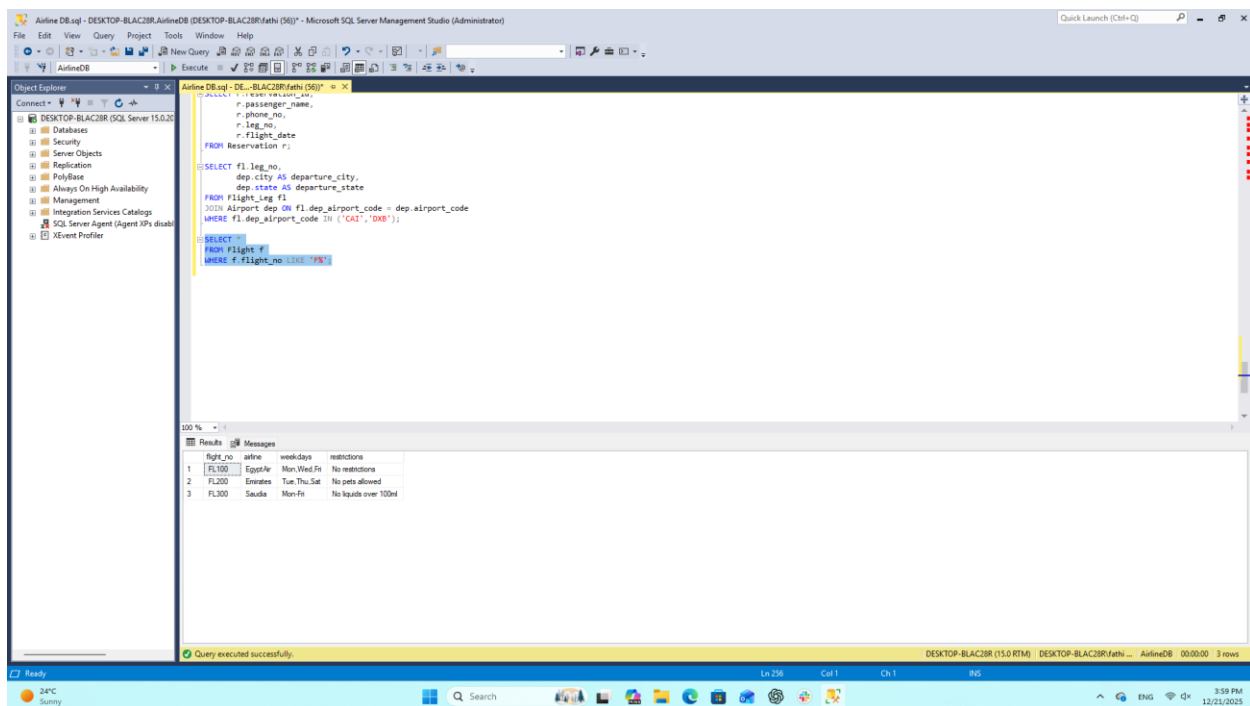
--Join TASK6--
SELECT f flight_no,
       dep.city AS departure_city,
       dep.state AS departure_state
FROM flight_leg fl
301IN airport dep ON fl dep_airport_code = dep airport_code
WHERE fl dep_airport_code IN ('CAI','DXB');
```

leg_no	departure_city	departure_state
101	Cairo	Egypt
102	Duba	UAE
103	Cairo	Egypt
104	Cairo	Egypt

Query executed successfully. Desktop status: 24°C Sunny, 3:56 PM, 12/21/2025.



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



Query executed successfully.

passenger_name	total_payment
Ahmed	500.00
Fatma Saleh	700.00
Hassan Omar	400.00
Sara Hassan	500.00

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

Query executed successfully.

passenger_name	phone_no	leg_no	flight_date
Ahmed	+20124567890	101	2025-06-10
Sara Hassan	NULL	101	2025-06-10

Microsoft SQL Server Management Studio (Administrator) window showing a query execution in the AirlineDB database. The query filters for flight leg numbers 400 and 700, and returns passenger names and flight details.

```
SELECT r.passenger_name, r.phone_no, r.flight_date
FROM Reservation r
WHERE r.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 Al Ahmed
2 Fatma Saleh
3 Hassan Omar
4 Sara Hassan

Query executed successfully. Status bar: DESKTOP-BLAC2BR (15.0 RTM) | DESKTOP-BLAC2BR/fatih ... AirlineDB 00:00:00 4 rows

Microsoft SQL Server Management Studio (Administrator) window showing a query execution in the AirlineDB database. The query filters for flight leg numbers 400 and 700, and returns passenger names and flight details.

```
FROM Reservation r
2018 Fare f ON r.flight_no = f.flight_no
GROUP BY r.passenger_name
HAVING SUM(f.amount) BETWEEN 400 AND 700;

USE AirlineDB;

SELECT r.passenger_name, r.phone_no, r.flight_date
FROM Reservation r
2018 Flight_Leg_Assignment fla
ON r.flight_no = fla.flight_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
2018 Flight_Leg_Assignment fla ON r.flight_no = fla.flight_no
ORDER BY r.flight_date;
```

Results:

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

Query executed successfully. Status bar: DESKTOP-BLAC2BR (15.0 RTM) | DESKTOP-BLAC2BR/fatih ... AirlineDB 00:00:00 4 rows

SQL Query1.sql - DE...BLAC28R/fathi (87) | Airline DB.sql - DE...BLAC28R/fathi (56) |

```

-- Flight Leg Assignment
WHERE fl.flight_no = 'FL100';
ON r.leg_no = fl.leg_no
-- Not possible to identify booking agents
-- Agent data is not stored in the database
SELECT passenger_name
FROM Reservation;

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

SELECT f.flight_no,
       ll.departure_time,
       f.airline
FROM Flight f
JOIN Flight_Leg_Assignment fl ON f.flight_no = fl.flight_no
JOIN Flight_Leg f1 ON fl.leg_no = f1.leg_no
JOIN Leg_Instance li ON f1.leg_no = li.leg_no
JOIN Airport a ON fl.dep_airport_code = a.airport_code
WHERE a.city = 'Cairo';

```

flight_no	departure_time	airline
FL100	08:05:00.0000000	EgyptAir
FL300	09:05:00.0000000	Saudia

Query executed successfully.

11. Display all staff members who are assigned as supervisors for flights.
I dont have Staff table.

SQL Query1.sql - DE...BLAC28R/fathi (87) | Airline DB.sql - DE...BLAC28R/fathi (56) |

```

-- Flight Leg Assignment
WHERE fl.flight_no = 'FL100';
ON r.leg_no = fl.leg_no
-- Not possible to identify booking agents
-- Agent data is not stored in the database
SELECT passenger_name
FROM Reservation;

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

SELECT f.flight_no,
       ll.departure_time,
       f.airline
FROM Flight f
JOIN Flight_Leg_Assignment fl ON f.flight_no = fl.flight_no
JOIN Flight_Leg f1 ON fl.leg_no = f1.leg_no
JOIN Leg_Instance li ON f1.leg_no = li.leg_no
JOIN Airport a ON fl.dep_airport_code = a.airport_code
WHERE a.city = 'Cairo';

USE AirlineDB;

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

```

reservation_id	passenger_name	phone_no	leg_no	flight_date
1	Ali Ahmed	+201234567890	101	2025-06-10
2	Fatma Salah	+971901234567	102	2025-06-10
3	Hassan Omar	+960301234567	103	2025-06-11
4	Sara Hassan	NULL	101	2025-06-10

Query executed successfully.