

Microsoft SQL Server Management Studio (Administrator)

Object Explorer: DESKTOP-BLAC2B8 (SQL Server 15.0.20080.1)

Results: Messages

200 rows

airport_code	name	city	state
CAI	Cairo International Airport	Cairo	Egypt
DXB	Dubai International Airport	Dubai	UAE
JED	King Abdulaziz Airport	Jeddah	Saudi Arabia

type_name	company	max_seats
Airbus A320	Airbus	140
Boeing 737	Boeing	180
Boeing 777	Boeing	350

leg_no	dep_airport_code	arr_airport_code	scheduled_dep_time	scheduled_arr_time
1	CAI	DXB	08:00:00.0000000	12:00:00.0000000
2	DXB	JED	14:00:00.0000000	18:00:00.0000000
3	CAI	JED	09:00:00.0000000	11:00:00.0000000
4	CAI	DXB	18:00:00.0000000	22:00:00.0000000

leg_no	flight_date	arrival_time	departure_time	available_seats
1	2025-06-10	12:05:00.0000000	08:05:00.0000000	120
2	2025-06-10	16:10:00.0000000	14:10:00.0000000	90
3	2025-06-11	11:05:00.0000000	09:05:00.0000000	200
4	2025-06-10	22:05:00.0000000	18:05:00.0000000	145

flight_no	airline	weekdays	restrictions
FL100	EgyptAir	Mon,Wed,Fri	No restrictions
FL200	Emirates	Tue,Thu,Sat	No pets allowed
FL300	Saudia	Mon-Fri	No liquids over...

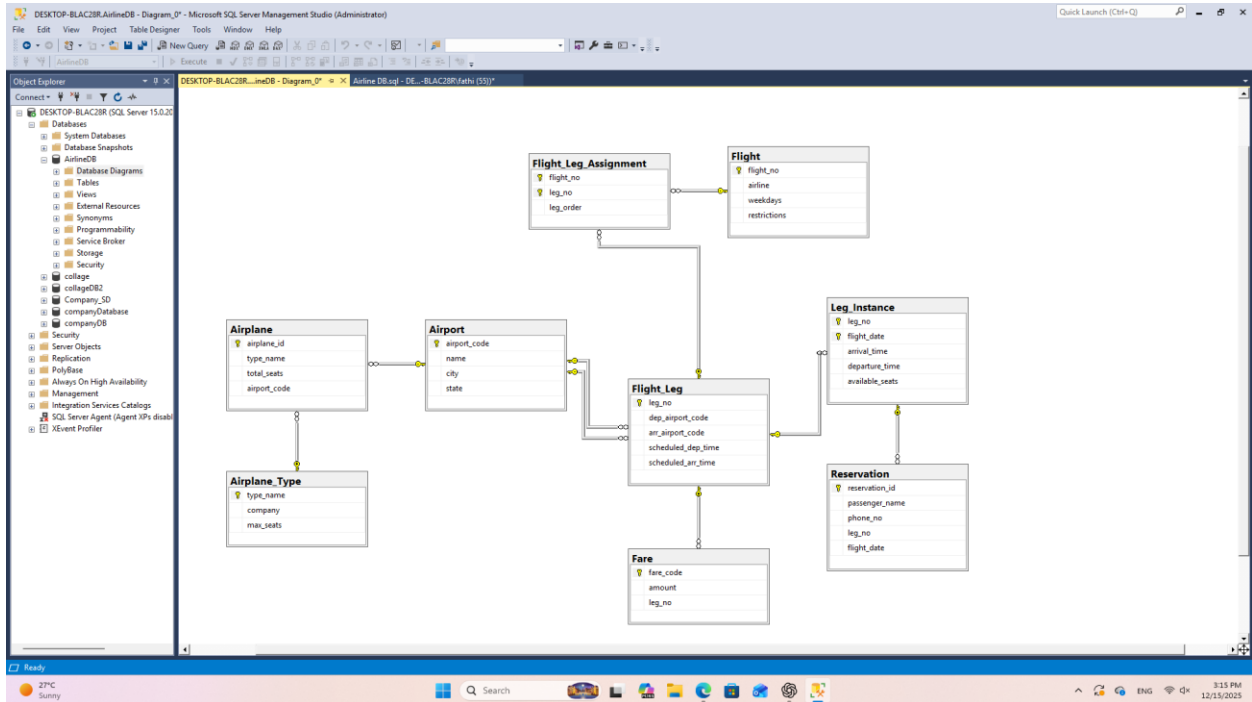
reservation_id	passenger_name	phone_no	leg_no	flight_date
1	Ali Ahmed	+971234567890	101	2025-06-10
2	Fatima Saleh	+971234567890	102	2025-06-10
3	Hassan Omar	+96501234567	103	2025-06-11
4	Sara Hassan	NULL	101	2025-06-10

airplane_id	type_name	total_seats	airport_code
1	Boeing 737	180	CAI
2	Boeing 777	350	DXB
3	Airbus A3...	160	CAI

fare_code	amount	leg_no
F100	500.00	101
F200	700.00	102
F300	400.00	103

flight_no	leg_no	leg_order
FL100	101	1
FL200	102	1
FL300	103	1

Query executed successfully.



Microsoft SQL Server Management Studio (Administrator)

Object Explorer: DESKTOP-BLAC2BR (SQL Server 15.0.0)

Query Editor: AirlineDB - DE...BLAC2BR/fathi (SSPI)

```

----FLIGHT
INSERT INTO Flight VALUES
('FL100','Egyptair','Mon,Tue,Fri','No restrictions'),
('FL200','Emirates','Tue,Thu,Sat','No pets allowed'),
('FL300','Saudia','Mon-Fri','No liquids over 100ml');

----FLIGHT LEG ASSIGNMENT
INSERT INTO Flight_Leg_Assignment VALUES
('FL100',101,1),
('FL200',102,1),
('FL300',103,1);

----FARE
INSERT INTO Fare VALUES
('F100',500.00,101),
('F200',700.00,102),
('F300',400.00,103);

---RESERVATION
INSERT INTO Reservation (passenger_name, phone_no, leg_no, flight_date) VALUES
('Ali Ahmed','+201234567890',101,'2025-06-10'),
('Fatima Saleh','+971501234567',102,'2025-06-10'),
('Hassan Omar','+966501234567',103,'2025-06-11');

----- DQL TASKS-----

-- 1. Display all flight leg records
SELECT * FROM Flight_Leg;

-- 2. Flight leg ID, scheduled departure, and arrival time

```

Results

leg_no	dep_airport_code	arr_airport_code	scheduled_dep_time	scheduled_arr_time
101	CAI	DIB	08:00:00.0000000	12:00:00.0000000
102	DIB	JED	14:00:00.0000000	16:00:00.0000000
103	CAI	JED	09:00:00.0000000	11:00:00.0000000

Query executed successfully.

Microsoft SQL Server Management Studio (Administrator)

Object Explorer: DESKTOP-BLAC2BR (SQL Server 15.0.0)

Query Editor: AirlineDB - DE...BLAC2BR/fathi (SSPI)

```

----FLIGHT LEG ASSIGNMENT
INSERT INTO Flight_Leg_Assignment VALUES
('FL100',101,1),
('FL200',102,1),
('FL300',103,1);

----FARE
INSERT INTO Fare VALUES
('F100',500.00,101),
('F200',700.00,102),
('F300',400.00,103);

---RESERVATION
INSERT INTO Reservation (passenger_name, phone_no, leg_no, flight_date) VALUES
('Ali Ahmed','+201234567890',101,'2025-06-10'),
('Fatima Saleh','+971501234567',102,'2025-06-10'),
('Hassan Omar','+966501234567',103,'2025-06-11');

----- DQL TASKS-----

-- 1. Display all flight leg records
SELECT * FROM Flight_Leg;

-- 2. Flight leg ID, scheduled departure, and arrival time
SELECT leg_no, scheduled_dep_time, scheduled_arr_time FROM Flight_Leg;

-- 3. Airplane ID, type, and seat capacity

```

Results

leg_no	scheduled_dep_time	scheduled_arr_time
101	08:00:00.0000000	12:00:00.0000000
102	14:00:00.0000000	16:00:00.0000000
103	09:00:00.0000000	11:00:00.0000000

Query executed successfully.

Airline DB.sql - DESKTOP-BLAC28R\AirlineDB (DESKTOP-BLAC28R\fatih (SS)) - Microsoft SQL Server Management Studio (Administrator)

Object Explorer: Connect to DESKTOP-BLAC28R (SQL Server 15.0.20709.1) | AirlineDB

```

-----FLIGHT LEG ASSIGNMENT
INSERT INTO Flight_Leg_Assignment VALUES
('F100',101,1),
('F200',102,1),
('F300',103,1);

-----FARE
INSERT INTO Fare VALUES
('F100',500.00,101),
('F200',700.00,102),
('F300',400.00,103);

---RESERVATION
INSERT INTO Reservation (passenger_name, phone_no, leg_no, flight_date) VALUES
('Ali Ahmed','+901234567890',101,'2025-06-10'),
('Fatima Saleh','+971501234567',102,'2025-06-10'),
('Hassan Omar','+966501234567',103,'2025-06-11');

----- DQL TASKS-----

-- 1. Display all flight leg records
SELECT * FROM Flight_Leg;

-- 2. Flight leg ID, scheduled departure, and arrival time
SELECT leg_no, scheduled_dep_time, scheduled_arr_time FROM Flight_Leg;

-- 3. Airplane ID, type, and seat capacity
SELECT airplane_id, type_name, total_seats FROM Airplane;

-- 4. Flight leg ID and available seats as AvailableSeats

```

Results

airplane_id	type_name	total_seats
1	Boeing 737	180
2	Boeing 777	350
3	Airbus A320	140

Query executed successfully. DESKTOP-BLAC28R (15.0 RTM) | DESKTOP-BLAC28R\fatih... | AirlineDB | 00:00:00 | 3 rows

Object Explorer: Connect to DESKTOP-BLAC28R (SQL Server 15.0.20709.1) | AirlineDB

```

-----FARE
INSERT INTO Fare VALUES
('F100',500.00,101),
('F200',700.00,102),
('F300',400.00,103);

---RESERVATION
INSERT INTO Reservation (passenger_name, phone_no, leg_no, flight_date) VALUES
('Ali Ahmed','+901234567890',101,'2025-06-10'),
('Fatima Saleh','+971501234567',102,'2025-06-10'),
('Hassan Omar','+966501234567',103,'2025-06-11');

----- DQL TASKS-----

-- 1. Display all flight leg records
SELECT * FROM Flight_Leg;

-- 2. Flight leg ID, scheduled departure, and arrival time
SELECT leg_no, scheduled_dep_time, scheduled_arr_time FROM Flight_Leg;

-- 3. Airplane ID, type, and seat capacity
SELECT airplane_id, type_name, total_seats FROM Airplane;

-- 4. Flight leg ID and available seats as AvailableSeats
SELECT leg_no, available_seats AS AvailableSeats FROM Leg_Instance;

-- 5. Flight legs with available seats > 100

```

Results

leg_no	AvailableSeats
101	120
102	90
103	200

Query executed successfully. DESKTOP-BLAC28R (15.0 RTM) | DESKTOP-BLAC28R\fatih... | AirlineDB | 00:00:00 | 3 rows

Microsoft SQL Server Management Studio (Administrator) - AirlineDB - DESKTOP-BLAC28R (SQL Server 15.0.20709.1) - Microsoft SQL Server Management Studio (Administrator)

Object Explorer: Connect to AirlineDB. Databases: AirlineDB. Server Objects: PolyBase, Always On High Availability, Integration Services Catalogs, SQL Server Agent (Agent XPs disabled), XEvent Profiler.

```

--FARE
INSERT INTO Fare VALUES
('F100',500.00,181),
('F200',700.00,182),
('F300',400.00,183);

--RESERVATION
INSERT INTO Reservation (passenger_name, phone_no, leg_no, flight_date) VALUES
('Ali Ahmed','+965123456789',181,'2025-06-10'),
('Fatima Saleh','+971501234567',182,'2025-06-10'),
('Hassan Omar','+966501234567',183,'2025-06-11');

----- DQL TASKS-----

-- 1. Display all flight leg records
SELECT * FROM Flight_Leg;

-- 2. Flight leg ID, scheduled departure, and arrival time
SELECT leg_no, scheduled_dep_time, scheduled_arr_time FROM Flight_Leg;

-- 3. Airplane ID, type, and seat capacity
SELECT airplane_id, type_name, total_seats FROM Airplane;

-- 4. Flight leg ID and available seats as AvailableSeats
SELECT leg_no, available_seats AS AvailableSeats FROM Leg_Instance;

-- 5. Flight legs with available seats > 100
SELECT leg_no FROM Leg_Instance WHERE available_seats > 100;

-- 6. Airplane IDs with seat capacity above 300
SELECT airplane_id FROM Airplane WHERE total_seats > 300;

```

Results: 2 rows

leg_no
181
183

Query executed successfully. DESKTOP-BLAC28R (15.0 RTM) | DESKTOP-BLAC28R\fatih ... AirlineDB 00:00:00 2 rows

Microsoft SQL Server Management Studio (Administrator) - AirlineDB - DESKTOP-BLAC28R (SQL Server 15.0.20709.1) - Microsoft SQL Server Management Studio (Administrator)

Object Explorer: Connect to AirlineDB. Databases: AirlineDB. Server Objects: PolyBase, Always On High Availability, Integration Services Catalogs, SQL Server Agent (Agent XPs disabled), XEvent Profiler.

```

--FARE
INSERT INTO Fare VALUES
('F200',700.00,182),
('F300',400.00,183);

--RESERVATION
INSERT INTO Reservation (passenger_name, phone_no, leg_no, flight_date) VALUES
('Ali Ahmed','+965123456789',181,'2025-06-10'),
('Fatima Saleh','+971501234567',182,'2025-06-10'),
('Hassan Omar','+966501234567',183,'2025-06-11');

----- DQL TASKS-----

-- 1. Display all flight leg records
SELECT * FROM Flight_Leg;

-- 2. Flight leg ID, scheduled departure, and arrival time
SELECT leg_no, scheduled_dep_time, scheduled_arr_time FROM Flight_Leg;

-- 3. Airplane ID, type, and seat capacity
SELECT airplane_id, type_name, total_seats FROM Airplane;

-- 4. Flight leg ID and available seats as AvailableSeats
SELECT leg_no, available_seats AS AvailableSeats FROM Leg_Instance;

-- 5. Flight legs with available seats > 100
SELECT leg_no FROM Leg_Instance WHERE available_seats > 100;

-- 6. Airplane IDs with seat capacity above 300
SELECT airplane_id FROM Airplane WHERE total_seats > 300;

-- 7. Airport codes and names where city = 'Cairo'
SELECT * FROM Airport WHERE city = 'Cairo';

```

Results: 1 row

airport_id
2

Query executed successfully. DESKTOP-BLAC28R (15.0 RTM) | DESKTOP-BLAC28R\fatih ... AirlineDB 00:00:00 1 rows

Microsoft SQL Server Management Studio (Administrator) window showing a query execution in the 'AirlineDB' database. The query is a multi-part script:

```
---RESERVATION
INSERT INTO Reservation (passenger_name, phone_no, leg_no, flight_date) VALUES
('Ali Ahmed', '+966123456789', 101, '2025-06-10'),
('Fatima Saleh', '+971501234567', 102, '2025-06-10'),
('Hassan Omar', '+966501234567', 103, '2025-06-11');

----- DQL TASKS-----

-- 1. Display all flight leg records
SELECT * FROM Flight_Leg;

-- 2. Flight leg ID, scheduled departure, and arrival time
SELECT leg_no, scheduled_dep_time, scheduled_arr_time FROM Flight_Leg;

-- 3. Airplane ID, type, and seat capacity
SELECT airplane_id, type_name, total_seats FROM Airplane;

-- 4. Flight leg ID and available seats as AvailableSeats
SELECT leg_no, available_seats AS AvailableSeats FROM Leg_Instance;

-- 5. Flight legs with available seats > 100
SELECT leg_no FROM Leg_Instance WHERE available_seats > 100;

-- 6. Airplane IDs with seat capacity above 300
SELECT airplane_id FROM Airplane WHERE total_seats > 300;

-- 7. Airport codes and names where city = 'Cairo'
SELECT airport_code, name FROM Airport WHERE city='Cairo';

-- 8. Flight legs scheduled on 2025-06-10
SELECT * FROM Flight_Leg WHERE flight_date='2025-06-10';
```

The Results pane shows the output of the 7th query:

airport_code	name
CAI	Cairo International Airport

Query executed successfully. Status bar: DESKTOP-BLAC28R (15.0 RTM) | DESKTOP-BLAC28R/fatih ... AirlineDB 00:00:00 1 rows

Microsoft SQL Server Management Studio (Administrator) window showing a query execution in the 'AirlineDB' database. The query is a multi-part script:

```
---RESERVATION
INSERT INTO Reservation (passenger_name, phone_no, leg_no, flight_date) VALUES
('Fatima Saleh', '+971501234567', 102, '2025-06-10'),
('Hassan Omar', '+966501234567', 103, '2025-06-11');

----- DQL TASKS-----

-- 1. Display all flight leg records
SELECT * FROM Flight_Leg;

-- 2. Flight leg ID, scheduled departure, and arrival time
SELECT leg_no, scheduled_dep_time, scheduled_arr_time FROM Flight_Leg;

-- 3. Airplane ID, type, and seat capacity
SELECT airplane_id, type_name, total_seats FROM Airplane;

-- 4. Flight leg ID and available seats as AvailableSeats
SELECT leg_no, available_seats AS AvailableSeats FROM Leg_Instance;

-- 5. Flight legs with available seats > 100
SELECT leg_no FROM Leg_Instance WHERE available_seats > 100;

-- 6. Airplane IDs with seat capacity above 300
SELECT airplane_id FROM Airplane WHERE total_seats > 300;

-- 7. Airport codes and names where city = 'Cairo'
SELECT airport_code, name FROM Airport WHERE city='Cairo';

-- 8. Flight legs scheduled on 2025-06-10
SELECT * FROM Flight_Leg WHERE flight_date='2025-06-10';

-- 9. Flight legs ordered by departure time
SELECT * FROM Flight_Leg ORDER BY flight_date, scheduled_dep_time;
```

The Results pane shows the output of the 9th query:

leg_no	flight_date	departure_time	available_seats
101	2025-06-10	12:05:00.0000000	120
102	2025-06-10	16:10:00.0000000	90

Query executed successfully. Status bar: DESKTOP-BLAC28R (15.0 RTM) | DESKTOP-BLAC28R/fatih ... AirlineDB 00:00:00 2 rows

Airline DB.sql - DESKTOP-BLAC28R\AirlineDB (DESKTOP-BLAC28R\fatih (SS)) - Microsoft SQL Server Management Studio (Administrator)

File Edit View Query Project Tools Window Help

Object Explorer

Connect: AirlineDB

DESKTOP-BLAC28R (SQL Server 15.0.20)

Databases

Security

Server Objects

Replication

PolyBase

Always On High Availability

Management

Integration Services Catalogs

SQL Server Agent (Agent XPs disabled)

XEvent Profiler

Query Editor

----- DQL TASKS-----

```
-- 1. Display all flight leg records
SELECT * FROM Flight_Leg;

-- 2. Flight leg ID, scheduled departure, and arrival time
SELECT leg_no, scheduled_dep_time, scheduled_arr_time FROM Flight_Leg;

-- 3. Airplane ID, type, and seat capacity
SELECT airplane_id, type_name, total_seats FROM Airplane;

-- 4. Flight leg ID and available seats as AvailableSeats
SELECT leg_no, available_seats AS AvailableSeats FROM Leg_Instance;

-- 5. Flight legs with available seats > 100
SELECT leg_no FROM Leg_Instance WHERE available_seats > 100;

-- 6. Airplane IDs with seat capacity above 300
SELECT airplane_id FROM Airplane WHERE total_seats > 300;

-- 7. Airport codes and names where city = 'Cairo'
SELECT airport_code, name FROM Airport WHERE city='Cairo';

-- 8. Flight legs scheduled on 2025-06-10
SELECT * FROM Leg_Instance WHERE flight_date='2025-06-10';

-- 9. Flight legs ordered by departure time
SELECT * FROM Flight_Leg ORDER BY scheduled_dep_time;

-- 10. Maximum, minimum, and average available seats
```

100 %

Results Messages

leg_no	dep_airport_code	arr_airport_code	scheduled_dep_time	scheduled_arr_time
1	101	CAI	08:00:00.0000000	12:00:00.0000000
2	103	CAI	09:00:00.0000000	11:00:00.0000000
3	102	DXB	14:00:00.0000000	16:00:00.0000000

Query executed successfully.

DESKTOP-BLAC28R (15.0 RTM) | DESKTOP-BLAC28R\fatih ... | AirlineDB | 00:00:00 | 3 rows

Ready 27°C Sunny

Airline DB.sql - DESKTOP-BLAC28R\AirlineDB (DESKTOP-BLAC28R\fatih (SS)) - Microsoft SQL Server Management Studio (Administrator)

File Edit View Query Project Tools Window Help

Object Explorer

Connect: AirlineDB

DESKTOP-BLAC28R (SQL Server 15.0.20)

Databases

Security

Server Objects

Replication

PolyBase

Always On High Availability

Management

Integration Services Catalogs

SQL Server Agent (Agent XPs disabled)

XEvent Profiler

Query Editor

```
-- 2. Flight leg ID, scheduled departure, and arrival time
SELECT leg_no, scheduled_dep_time, scheduled_arr_time FROM Flight_Leg;

-- 3. Airplane ID, type, and seat capacity
SELECT airplane_id, type_name, total_seats FROM Airplane;

-- 4. Flight leg ID and available seats as AvailableSeats
SELECT leg_no, available_seats AS AvailableSeats FROM Leg_Instance;

-- 5. Flight legs with available seats > 100
SELECT leg_no FROM Leg_Instance WHERE available_seats > 100;

-- 6. Airplane IDs with seat capacity above 300
SELECT airplane_id FROM Airplane WHERE total_seats > 300;

-- 7. Airport codes and names where city = 'Cairo'
SELECT airport_code, name FROM Airport WHERE city='Cairo';

-- 8. Flight legs scheduled on 2025-06-10
SELECT * FROM Leg_Instance WHERE flight_date='2025-06-10';

-- 9. Flight legs ordered by departure time
SELECT * FROM Flight_Leg ORDER BY scheduled_dep_time;

-- 10. Maximum, minimum, and average available seats
SELECT MAX(available_seats) AS MaxSeats,
MIN(available_seats) AS MinSeats,
AVG(available_seats) AS AvgSeats
FROM Leg_Instance;

-- 11. Total number of flight legs
```

100 %

Results Messages

MaxSeats	MinSeats	AvgSeats
200	90	126

Query executed successfully.

DESKTOP-BLAC28R (15.0 RTM) | DESKTOP-BLAC28R\fatih ... | AirlineDB | 00:00:00 | 1 rows

Ready 27°C Sunny

Microsoft SQL Server Management Studio (Administrator) window showing a query in the SQL Query Editor. The query is a multi-part SQL script with comments and SQL statements. The results pane shows the output of the query, which is a single row with the value 3.

```
-- 3. Airplane ID, type, and seat capacity
SELECT airplane_id, type_name, total_seats FROM Airplane;

-- 4. Flight leg ID and available seats as AvailableSeats
SELECT leg_no, available_seats AS AvailableSeats FROM Leg_Instance;

-- 5. Flight legs with available seats > 100
SELECT leg_no FROM Leg_Instance WHERE available_seats > 100;

-- 6. Airplane IDs with seat capacity above 300
SELECT airplane_id FROM Airplane WHERE total_seats > 300;

-- 7. Airport codes and names where city = 'Cairo'
SELECT airport_code, name FROM Airport WHERE city='Cairo';

-- 8. Flight legs scheduled on 2025-06-10
SELECT * FROM Leg_Instance WHERE flight_date='2025-06-10';

-- 9. Flight legs ordered by departure time
SELECT * FROM Flight_Leg ORDER BY scheduled_dep_time;

-- 10. Maximum, minimum, and average available seats
SELECT MAX(available_seats) AS MaxSeats,
MIN(available_seats) AS MinSeats,
AVG(available_seats) AS AvgSeats
FROM Leg_Instance;

-- 11. Total number of flight legs
SELECT COUNT(*) AS TotalFlightLegs FROM Flight_Leg;

-- 12. Airplanes whose type contains 'Boeing'
SELECT * FROM Airplane WHERE type_name LIKE 'Boeing%';
```

Results

1
3

Query executed successfully.

Microsoft SQL Server Management Studio (Administrator) window showing a query in the SQL Query Editor. The query is a multi-part SQL script with comments and SQL statements. The results pane shows the output of the query, which is a table with 2 rows.

```
-- 4. Flight leg ID and available seats as AvailableSeats
SELECT leg_no, available_seats AS AvailableSeats FROM Leg_Instance;

-- 5. Flight legs with available seats > 100
SELECT leg_no FROM Leg_Instance WHERE available_seats > 100;

-- 6. Airplane IDs with seat capacity above 300
SELECT airplane_id FROM Airplane WHERE total_seats > 300;

-- 7. Airport codes and names where city = 'Cairo'
SELECT airport_code, name FROM Airport WHERE city='Cairo';

-- 8. Flight legs scheduled on 2025-06-10
SELECT * FROM Leg_Instance WHERE flight_date='2025-06-10';

-- 9. Flight legs ordered by departure time
SELECT * FROM Flight_Leg ORDER BY scheduled_dep_time;

-- 10. Maximum, minimum, and average available seats
SELECT MAX(available_seats) AS MaxSeats,
MIN(available_seats) AS MinSeats,
AVG(available_seats) AS AvgSeats
FROM Leg_Instance;

-- 11. Total number of flight legs
SELECT COUNT(*) AS TotalFlightLegs FROM Flight_Leg;

-- 12. Airplanes whose type contains 'Boeing'
SELECT * FROM Airplane WHERE type_name LIKE 'Boeing%';
```

Results

airplane_id	type_name	total_seats	airport_code
1	Boeing 737	180	CAI
2	Boeing 777	350	DXB

Query executed successfully.

SQL Query2.sql - DE...BLAC2BR/fatih (55) - Airline DB.sql - DE...BLAC2BR/fatih (55) \*

```

-- 7. Airport codes and names where city = 'Cairo'
SELECT airport_code, name FROM Airport WHERE city='Cairo';

-- 8. Flight legs scheduled on 2025-06-10
SELECT * FROM Leg_Instance WHERE Flight_date='2025-06-10';

-- 9. Flight legs ordered by departure time
SELECT * FROM Flight_Leg ORDER BY scheduled_dep_time;

-- 10. Maximum, minimum, and average available seats
SELECT MAX(available_seats) AS MaxSeats,
       MIN(available_seats) AS MinSeats,
       AVG(available_seats) AS AvgSeats
FROM Leg_Instance;

-- 11. Total number of flight legs
SELECT COUNT(*) AS TotalFlightLegs FROM Flight_Leg;

-- 12. Airplanes whose type contains 'Boeing'
SELECT * FROM Airplane WHERE type_name LIKE '%Boeing%';

-----
--DML TASKS--
-----

-- 13. Insert new flight leg CAI - DXB on 2025-06-10
INSERT INTO Flight_Leg VALUES (104, 'CAI', 'DXB', '18:00', '22:00');
INSERT INTO Leg_Instance VALUES (104, '2025-06-10', '22:00', '18:00', 150);

-- 14. Insert a customer with NULL contact number
INSERT INTO Reservation (passenger_name, phone_no, leg_no, flight_date)

```

Results Messages

leg_no	flight_date	arrival_time	departure_time	available_seats
101	2025-06-10	12:05:00.0000000	08:05:00.0000000	120
102	2025-06-10	16:10:00.0000000	14:10:00.0000000	50
103	2025-06-11	11:05:00.0000000	09:05:00.0000000	200
104	2025-06-10	22:05:00.0000000	18:05:00.0000000	150

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

SQL Query2.sql - DE...BLAC2BR/fatih (55) - Airline DB.sql - DE...BLAC2BR/fatih (55) \*

```

--RESERVATION
INSERT INTO Reservation (passenger_name, phone_no, leg_no, flight_date) VALUES
('Ali Ahmed', '+201234567890', 101, '2025-06-10'),
('Fatma Saleh', '+971581234567', 102, '2025-06-10'),
('Hassan Omar', '+966301234567', 103, '2025-06-11');

-----
--DQL TASKS-----
-----

-- 1. Display all flight leg records
SELECT * FROM Flight_Leg;
SELECT * FROM Leg_Instance;
SELECT * FROM Reservation;

-- 2. Flight leg ID, scheduled departure, and arrival time
SELECT leg_no, scheduled_dep_time, scheduled_arr_time FROM Flight_Leg;

-- 3. Airplane ID, type, and seat capacity
SELECT airplane_id, type_name, total_seats FROM Airplane;

-- 4. Flight leg ID and available seats as AvailableSeats
SELECT leg_no, available_seats AS AvailableSeats FROM Leg_Instance;

-- 5. Flight legs with available seats > 100
SELECT leg_no FROM Leg_Instance WHERE available_seats > 100;

-- 6. Airplane IDs with seat capacity above 300
SELECT airplane_id FROM Airplane WHERE total_seats > 300;

-- 7. Airport codes and names where city = 'Cairo'
SELECT airport_code, name FROM Airport WHERE city='Cairo';

```

Results Messages

reservation_id	passenger_name	phone_no	leg_no	flight_date
1	Ali Ahmed	+201234567890	101	2025-06-10
2	Fatma Saleh	+971581234567	102	2025-06-10
3	Hassan Omar	+966301234567	103	2025-06-11
4	Sara Hassan	NULL	101	2025-06-10

Query executed successfully. 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 is titled "AVG(available\_seats) AS AvgSeats" and is executed in the "AirlineDB" database.

```
SQLQuery2.sql - DE...BLAC28R/fathi (55) Airline DB.sql - DE...BLAC28R/fathi (55)
-- 11. Total number of flight legs
SELECT COUNT(*) AS TotalFlightLegs FROM Flight_Leg;
-- 12. Airplanes whose type contains 'Boeing'
SELECT * FROM Airplane WHERE type_name LIKE 'Boeing%';
----- DDL TASKS -----
-- 13. Insert new flight leg CAI to DXB on 2025-06-10
INSERT INTO Flight_Leg VALUES (104, 'CAI', 'DXB', '10:00', '22:00');
INSERT INTO Leg_Instance VALUES (104, '2025-06-10', '22:00', '18:00', '150');
-- 14. Insert a customer with NULL contact number
INSERT INTO Reservation (passenger_name, phone_no, leg_no, flight_date)
VALUES ('Sara Hassan', NULL, 101, '2025-06-10');
-- 15. Reduce available seats of inserted flight leg by 5
UPDATE Leg_Instance
SET available_seats = available_seats - 5
WHERE leg_no = 104 AND flight_date = '2025-06-10';
-- 16. Increase available seats by 10 for all domestic flights
UPDATE LI
SET available_seats = available_seats + 10
FROM Leg_Instance LI
JOIN Flight_Leg FL ON LI.leg_no = FL.leg_no
WHERE FL.arr_airport_code = FL.arr_airport_code;
```

Results (4 rows):

leg_no	flight_date	arrival_time	departure_time	available_seats
101	2025-06-10	12:05:00.0000000	08:05:00.0000000	120
102	2025-06-10	16:10:00.0000000	14:10:00.0000000	90
103	2025-06-11	11:05:00.0000000	09:05:00.0000000	200
104	2025-06-10	22:05:00.0000000	18:05:00.0000000	145

Query executed successfully. Desktop-Blac28r (15.0 RTM) | Desktop-Blac28r/fathi... | AirlineDB | 00:00:00 | 4 rows

Microsoft SQL Server Management Studio (Administrator) window showing a query execution in the AirlineDB database. The query is titled "INSERT INTO Fare VALUES" and is executed in the "AirlineDB" database.

```
SQLQuery2.sql - DE...BLAC28R/fathi (55) Airline DB.sql - DE...BLAC28R/fathi (55)
-- 1. Display all flight leg records
SELECT * FROM Flight_Leg;
SELECT * FROM Leg_Instance;
SELECT * FROM Reservation;
SELECT * FROM Airplane;
-- 2. Flight leg ID, scheduled departure, and arrival time
SELECT leg_no, scheduled_dep_time, scheduled_arr_time FROM Flight_Leg;
-- 3. Airplane ID, type, and seat capacity
SELECT airplane_id, type_name, total_seats FROM Airplane;
-- 4. Flight leg ID and available seats as AvailableSeats
SELECT leg_no, available_seats AS AvailableSeats FROM Leg_Instance;
-- 5. Flight legs with available seats > 100
SELECT * FROM Leg_Instance WHERE available_seats > 100;
```

Results (3 rows):

airplane_id	type_name	total_seats	airport_code
1	Boeing 737	180	CAI
2	Boeing 777	350	DXB
3	Airbus A320	160	CAI

Query executed successfully. Desktop-Blac28r (15.0 RTM) | Desktop-Blac28r/fathi... | AirlineDB | 00:00:00 | 3 rows