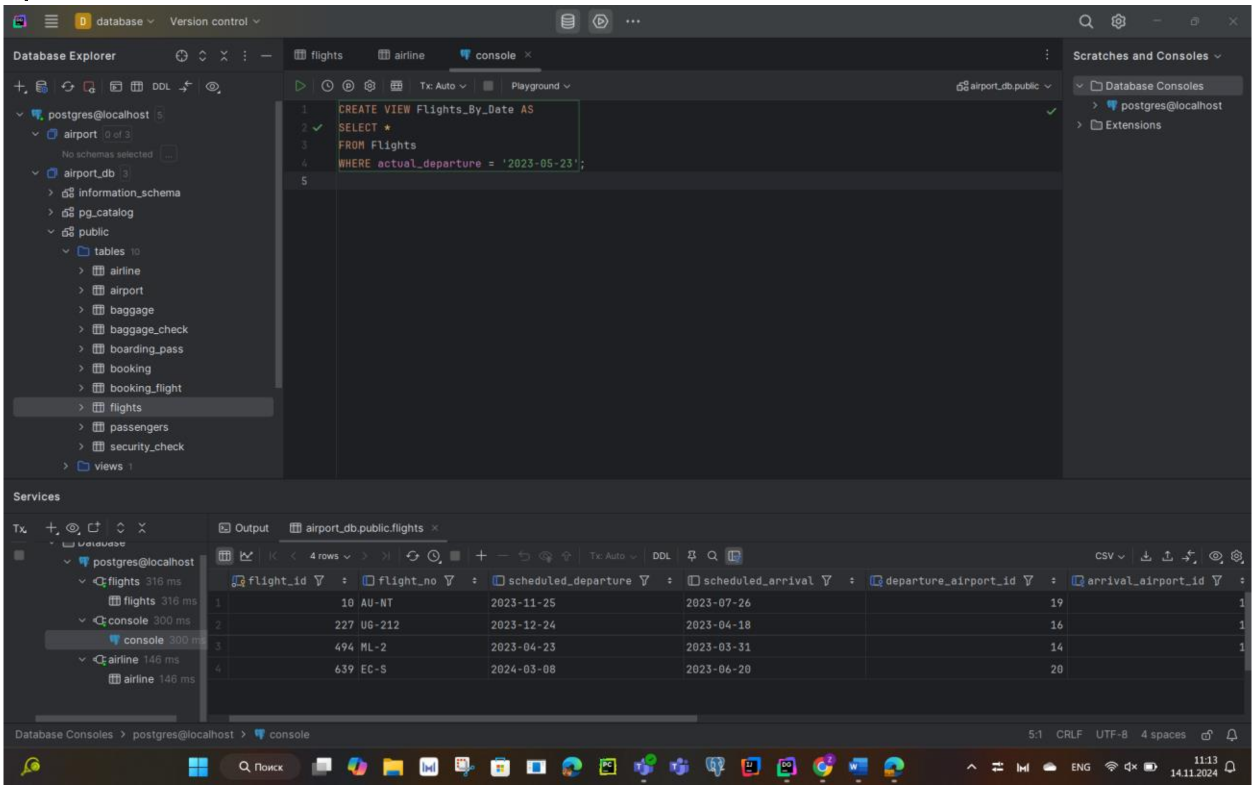
Laboratory work 8

VIEW.

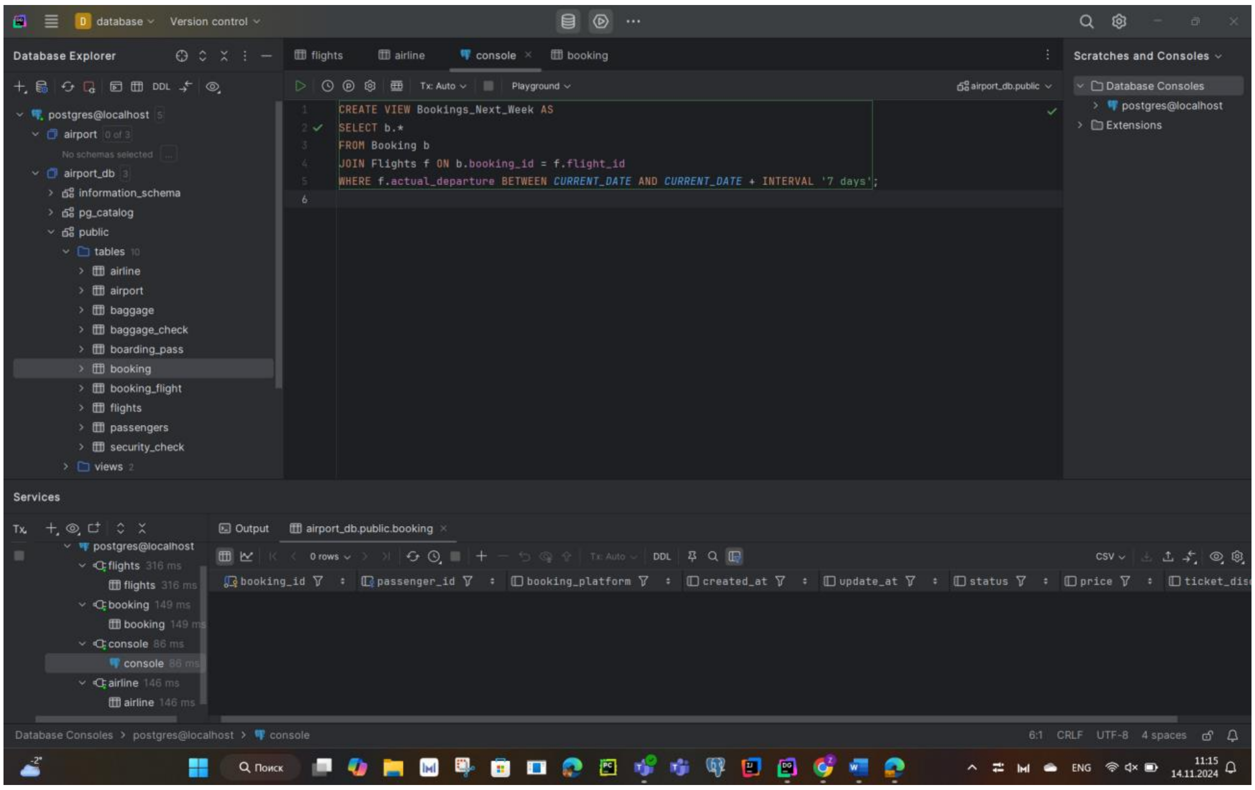
1. Create a view to show details of all flights that are departing on a specific date.



```sql
CREATE VIEW Flights_By_Date AS
SELECT *
FROM Flights
WHERE actual_departure = '2023-05-23';
```

```
  flight_id  flight_no  scheduled_departure  scheduled_arrival  departure_airport_id  arrival_airport_id
1        10  AU-NT      2023-11-25           2023-07-26                           19                   1
2       227  UG-212     2023-12-24           2023-04-18                           16                   1
3       494  ML-2       2023-04-23           2023-03-31                           14                   1
4       639  EC-S       2024-03-08           2023-06-20                           20
```

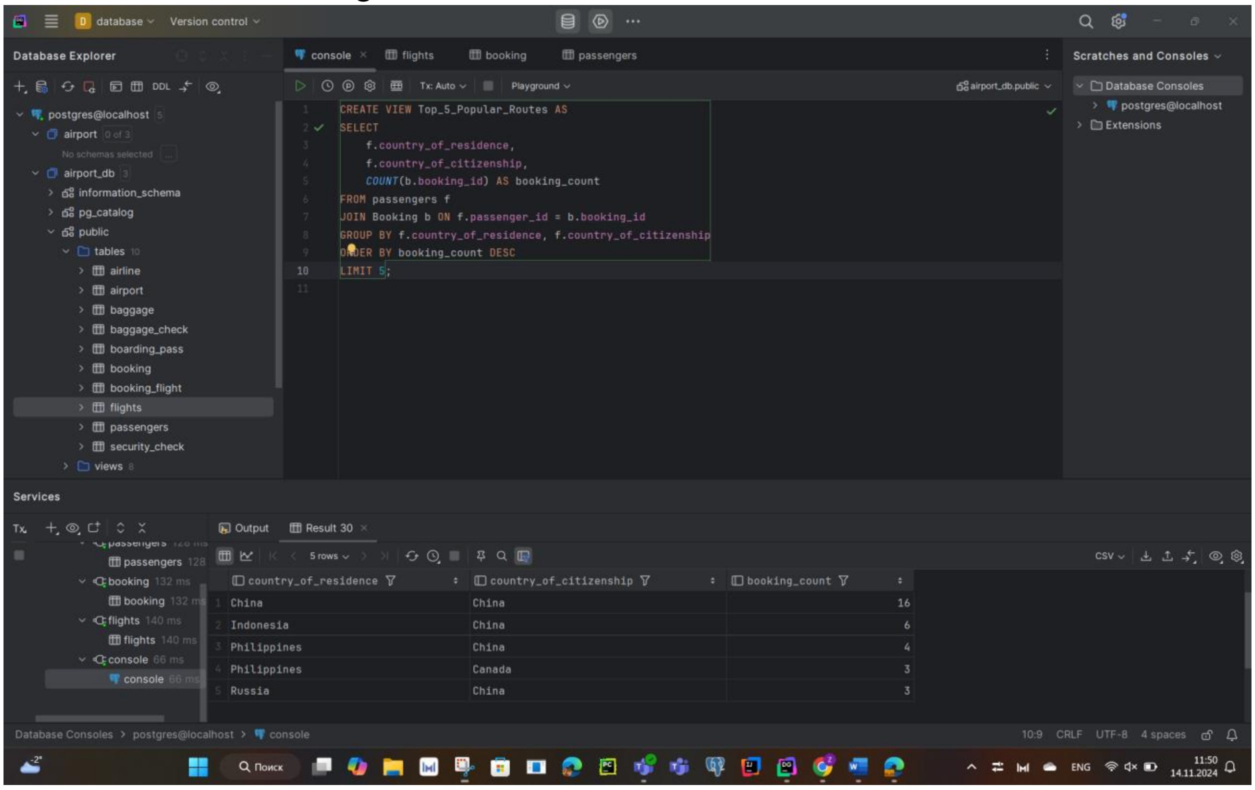
2. Create a view that shows bookings for flights scheduled to depart within the next week.



```sql
CREATE VIEW Bookings_Next_Week AS
SELECT b.*
FROM Booking b
JOIN Flights f ON b.booking_id = f.flight_id
WHERE f.actual_departure BETWEEN CURRENT_DATE AND CURRENT_DATE + INTERVAL '7 days';
```

```
booking_id  passenger_id  booking_platform  created_at  update_at  status  price  ticket_dis
```

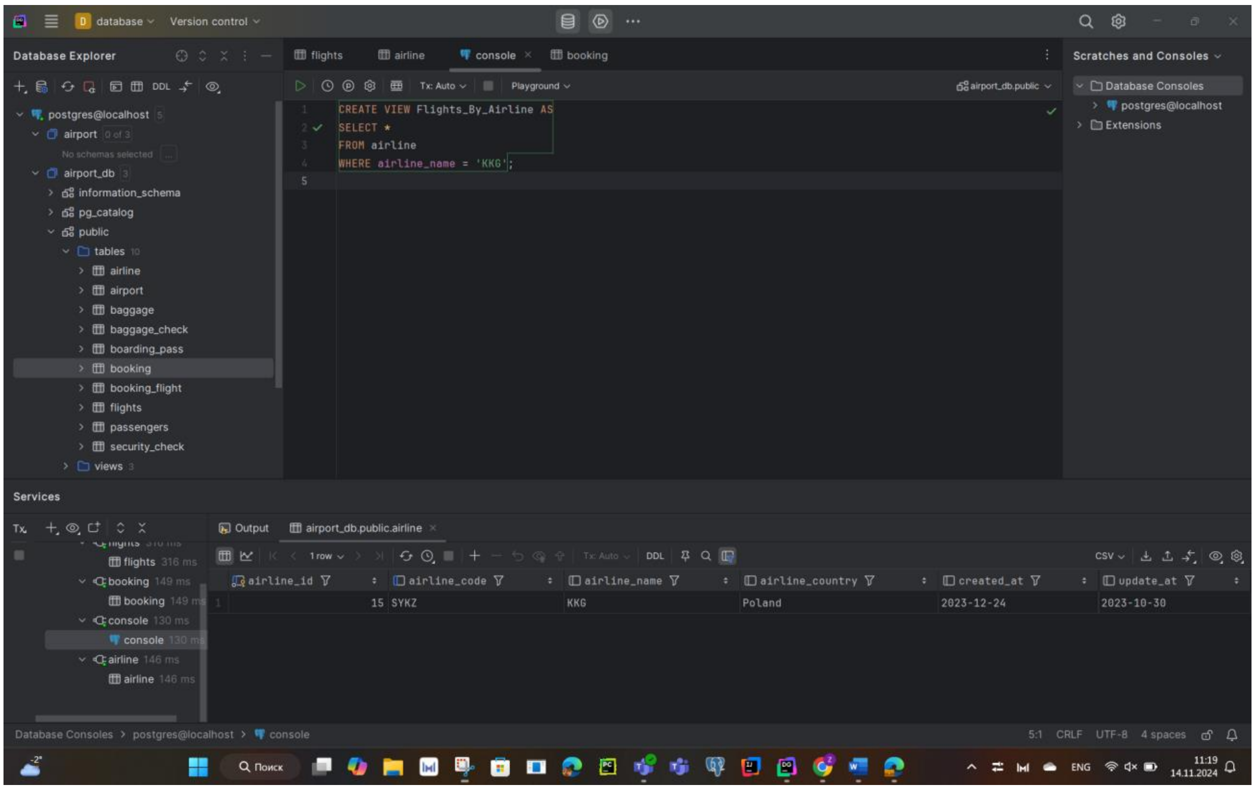
3. Create a view to show the top 5 most popular flight routes based on the number of bookings.



```sql
CREATE VIEW Top_5_Popular_Routes AS
SELECT
    f.country_of_residence,
    f.country_of_citizenship,
    COUNT(b.booking_id) AS booking_count
FROM passengers f
JOIN Booking b ON f.passenger_id = b.booking_id
GROUP BY f.country_of_residence, f.country_of_citizenship
ORDER BY booking_count DESC
LIMIT 5;
```

	country_of_residence	country_of_citizenship	booking_count
1	China	China	16
2	Indonesia	China	6
3	Philippines	China	4
4	Philippines	Canada	3
5	Russia	China	3

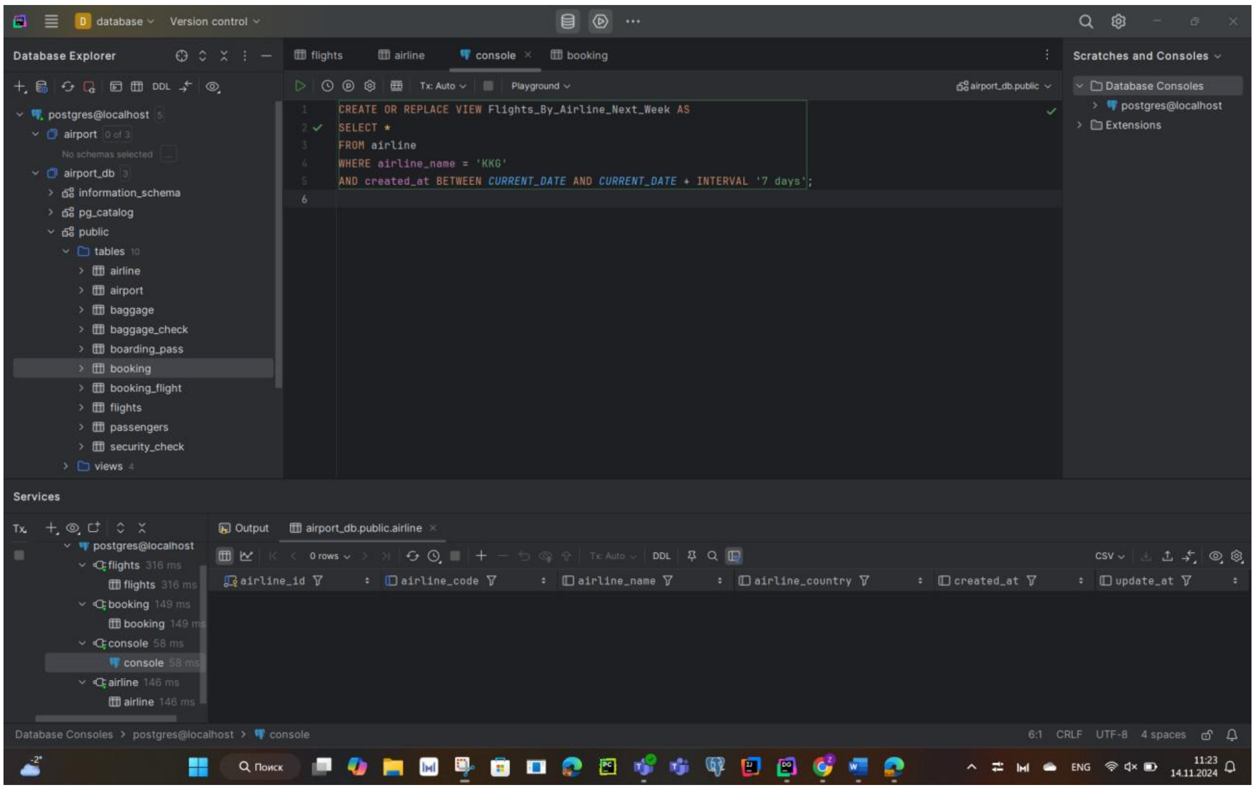
4. Create a view that lists all flights for a specific airline.



```sql
CREATE VIEW Flights_By_Airline AS
SELECT *
FROM airline
WHERE airline_name = 'KKG';
```

	airline_id	airline_code	airline_name	airline_country	created_at	update_at
1	15	SYKZ	KKG	Poland	2023-12-24	2023-10-30

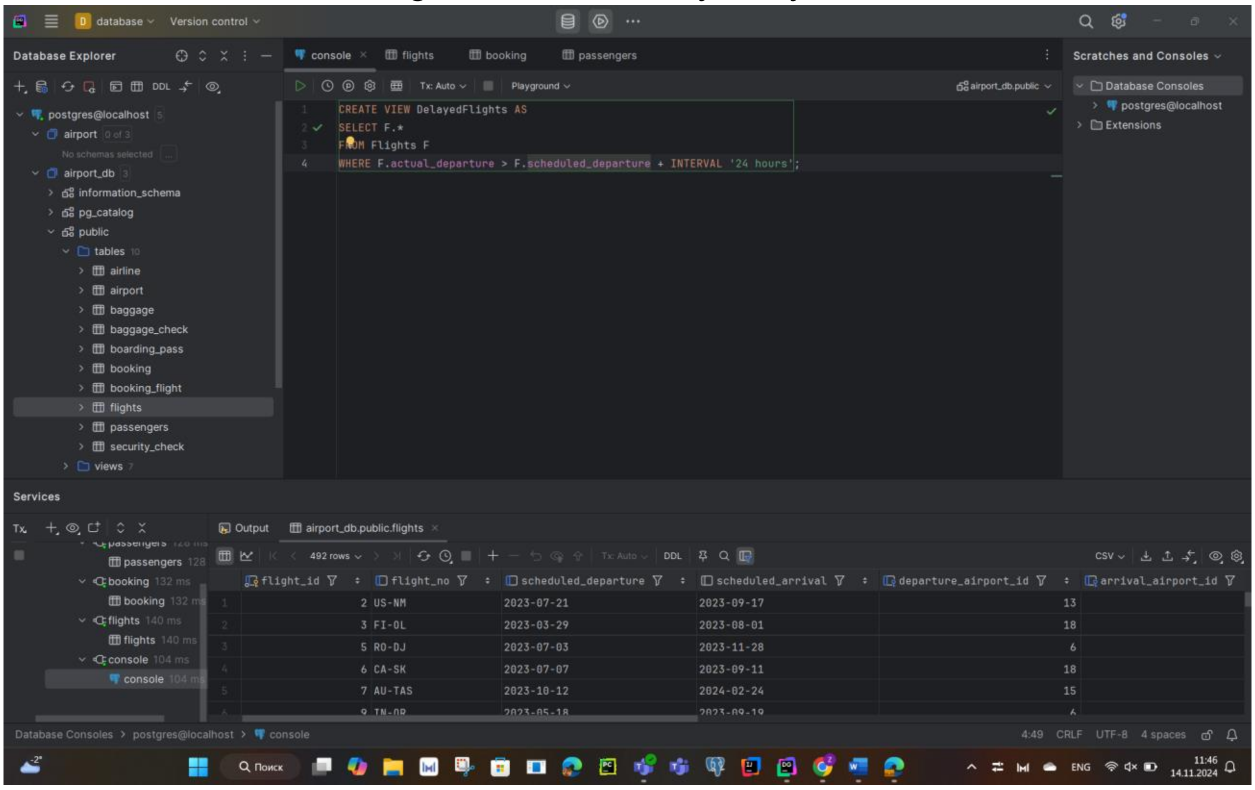
5. Modify the view created in task 4 to show only flights departing within the next 7 days for a specific airline.



```sql
CREATE OR REPLACE VIEW Flights_By_Airline_Next_Week AS
SELECT *
FROM airline
WHERE airline_name = 'KKG'
AND created_at BETWEEN CURRENT_DATE AND CURRENT_DATE + INTERVAL '7 days';
```

```
airline_id   airline_code   airline_name   airline_country   created_at   update_at
```

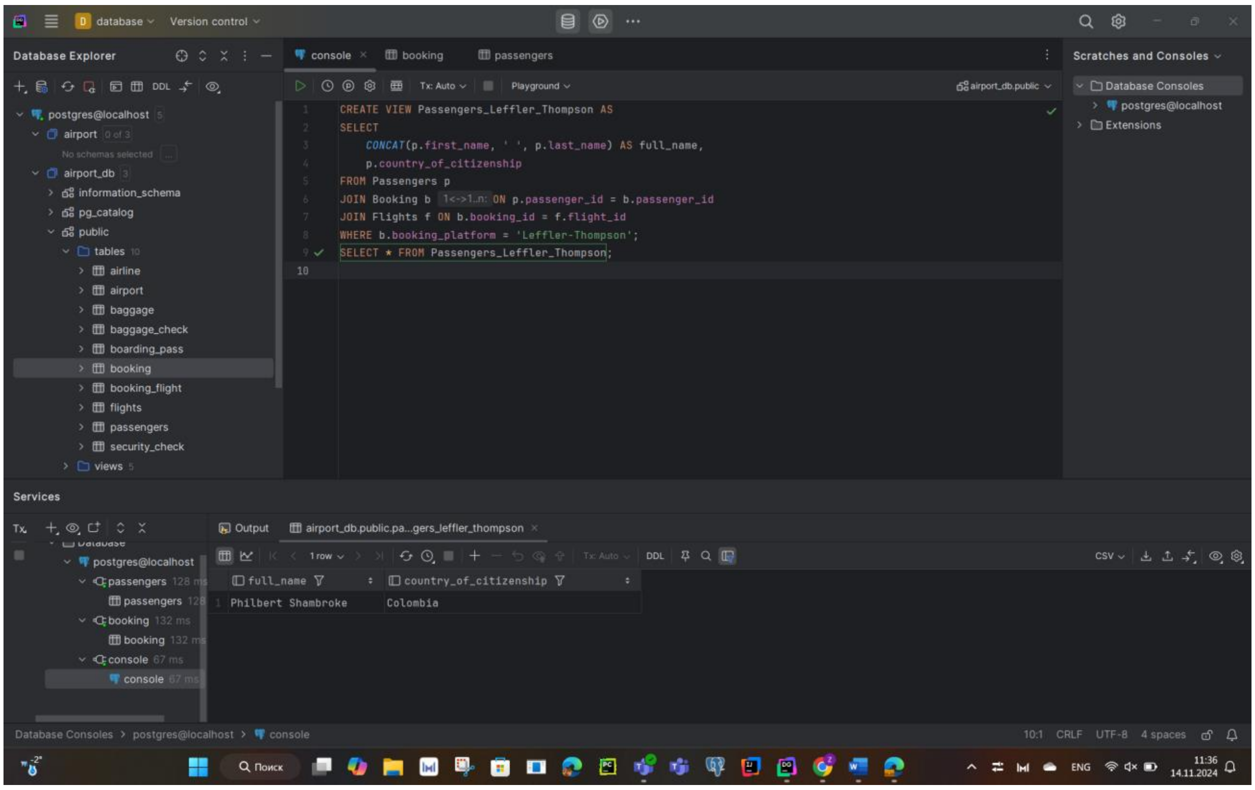
6. Create a view to show flights that are delayed by more than 24 hours.



```sql
CREATE VIEW DelayedFlights AS
SELECT F.*
FROM Flights F
WHERE F.actual_departure > F.scheduled_departure + INTERVAL '24 hours';
```

```
     flight_id  flight_no  scheduled_departure  scheduled_arrival  departure_airport_id  arrival_airport_id
1            2  US-NM      2023-07-21           2023-09-17                           13
2            3  FI-OL      2023-03-29           2023-08-01                           18
3            5  RO-DJ      2023-07-03           2023-11-28                            6
4            6  CA-SK      2023-07-07           2023-09-11                           18
5            7  AU-TAS     2023-10-12           2024-02-24                           15
6            9  IN-OR      2023-05-18           2023-09-19                            6
```

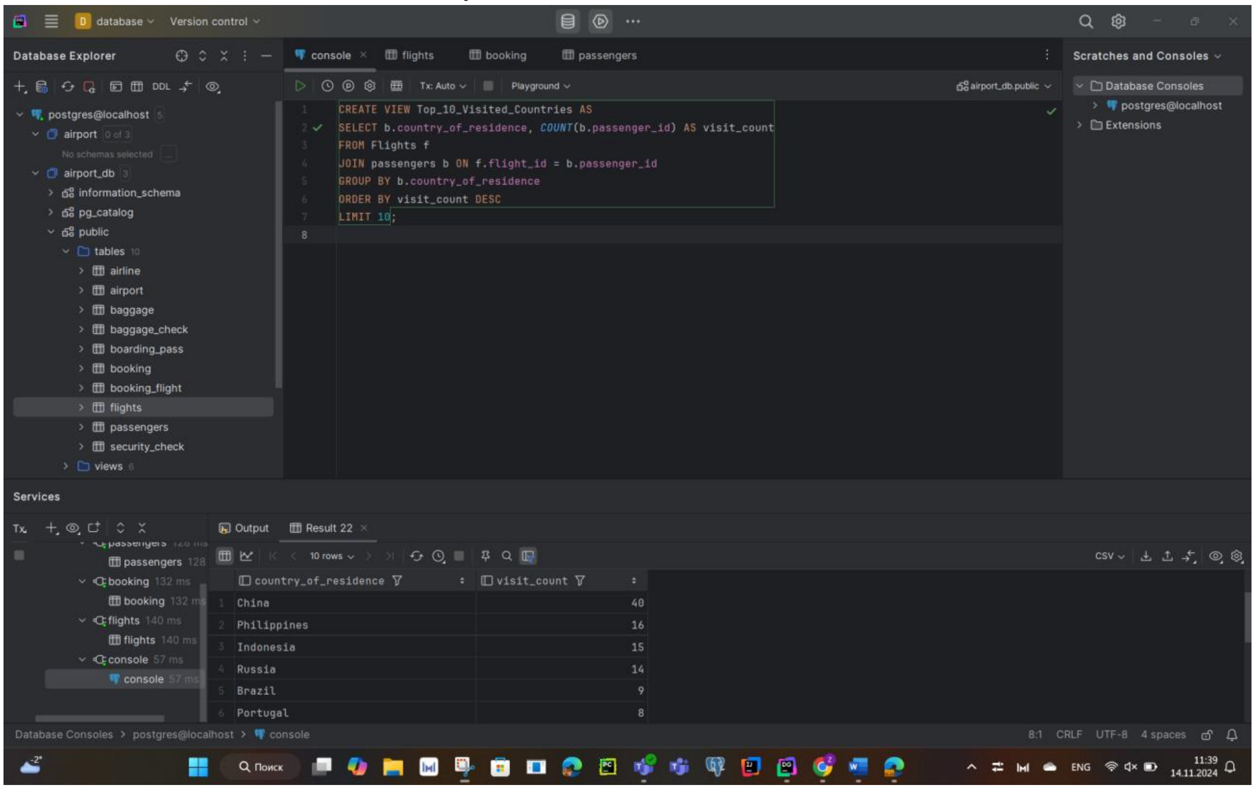
7. Create a view in which you can display the full name and country of origin of passengers who made bookings on Leffler-Thompson platform. Then show the list of that passengers.



```sql
CREATE VIEW Passengers_Leffler_Thompson AS
SELECT
    CONCAT(p.first_name, ' ', p.last_name) AS full_name,
    p.country_of_citizenship
FROM Passengers p
JOIN Booking b ON p.passenger_id = b.passenger_id
JOIN Flights f ON b.booking_id = f.flight_id
WHERE b.booking_platform = 'Leffler-Thompson';
SELECT * FROM Passengers_Leffler_Thompson;
```

```
   full_name           country_of_citizenship
1  Philbert Shambroke  Colombia
```

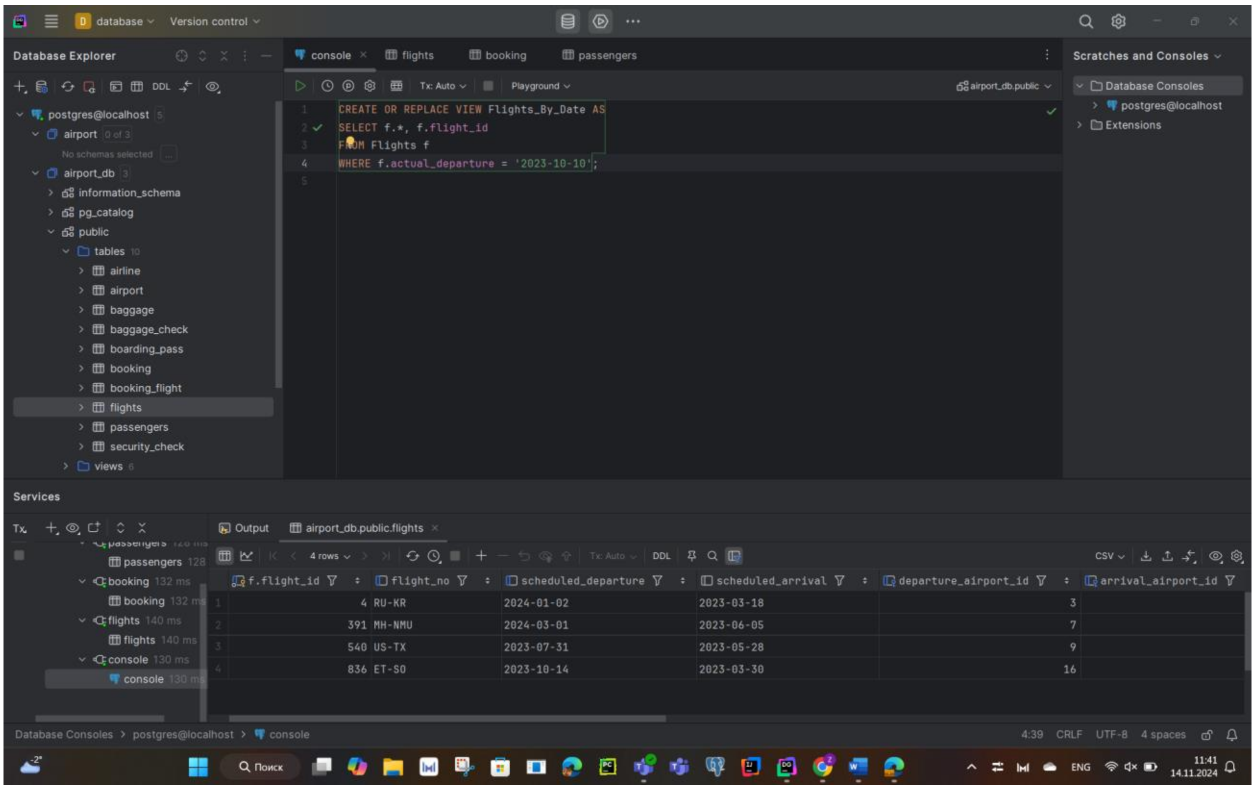
8. Create a view that shows top 10 most visited countries.



```sql
CREATE VIEW Top_10_Visited_Countries AS
SELECT b.country_of_residence, COUNT(b.passenger_id) AS visit_count
FROM Flights f
JOIN passengers b ON f.flight_id = b.passenger_id
GROUP BY b.country_of_residence
ORDER BY visit_count DESC
LIMIT 10;
```

```
   country_of_residence   visit_count
1  China                           40
2  Philippines                     16
3  Indonesia                       15
4  Russia                          14
5  Brazil                           9
6  Portugal                         8
```

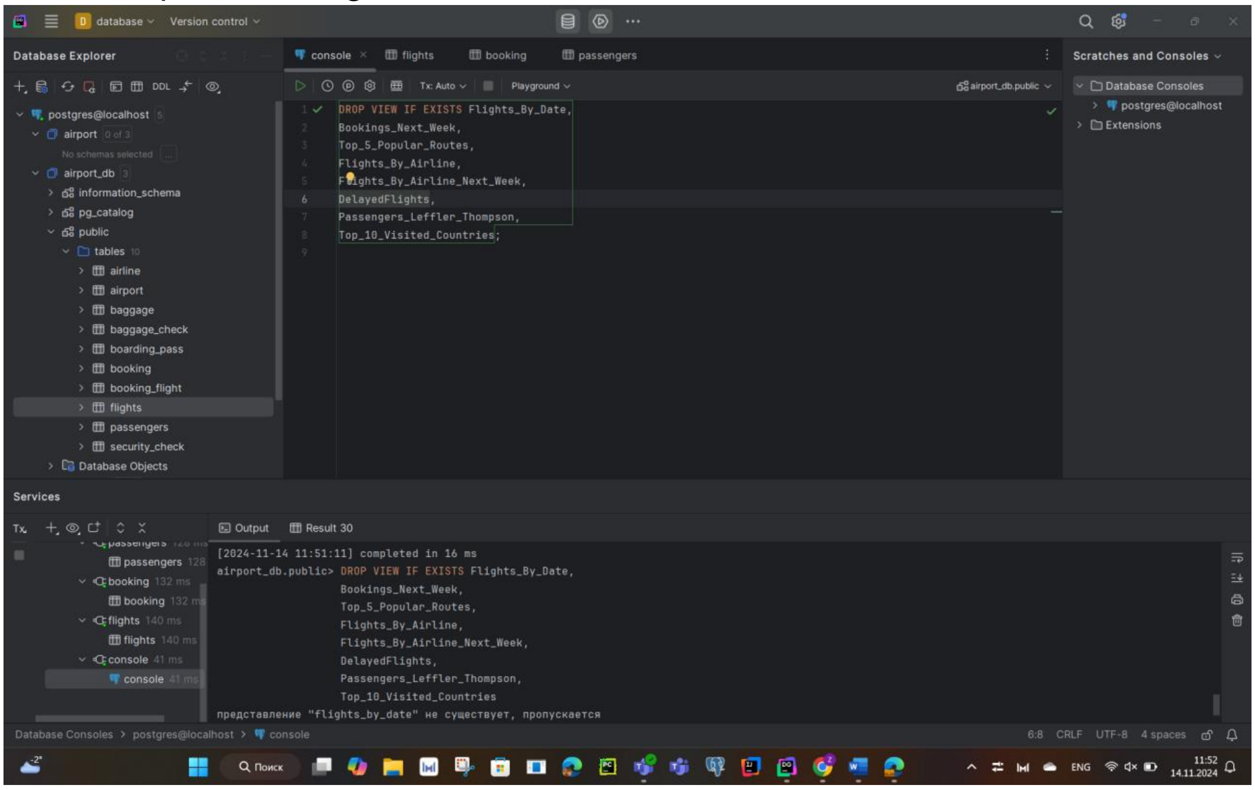
9. Update any of the created views by adding new information in the view table. Show results.



```sql
CREATE OR REPLACE VIEW Flights_By_Date AS
SELECT f.*, f.flight_id
FROM Flights f
WHERE f.actual_departure = '2023-10-10';
```

	f.flight_id	flight_no	scheduled_departure	scheduled_arrival	departure_airport_id	arrival_airport_id
1	4	RU-KR	2024-01-02	2023-03-18	3	
2	391	MH-NMU	2024-03-01	2023-06-05	7	
3	540	US-TX	2023-07-31	2023-05-28	9	
4	836	ET-SO	2023-10-14	2023-03-30	16	

10. Drop all existing views.



```sql
DROP VIEW IF EXISTS Flights_By_Date,
Bookings_Next_Week,
Top_5_Popular_Routes,
Flights_By_Airline,
Flights_By_Airline_Next_Week,
DelayedFlights,
Passengers_Leffler_Thompson,
Top_10_Visited_Countries;
```

```
[2024-11-14 11:51:11] completed in 16 ms
airport_db.public> DROP VIEW IF EXISTS Flights_By_Date,
                   Bookings_Next_Week,
                   Top_5_Popular_Routes,
                   Flights_By_Airline,
                   Flights_By_Airline_Next_Week,
                   DelayedFlights,
                   Passengers_Leffler_Thompson,
                   Top_10_Visited_Countries
представление "flights_by_date" не существует, пропускается
```