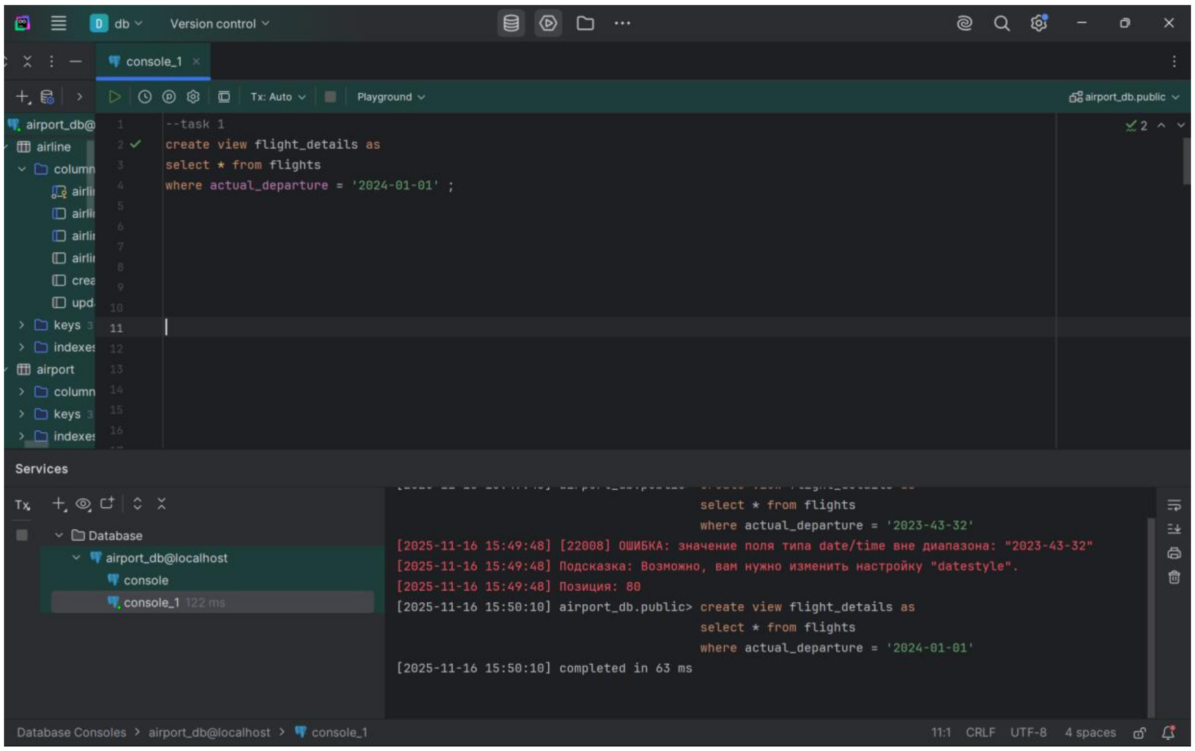
Laboratory work 8

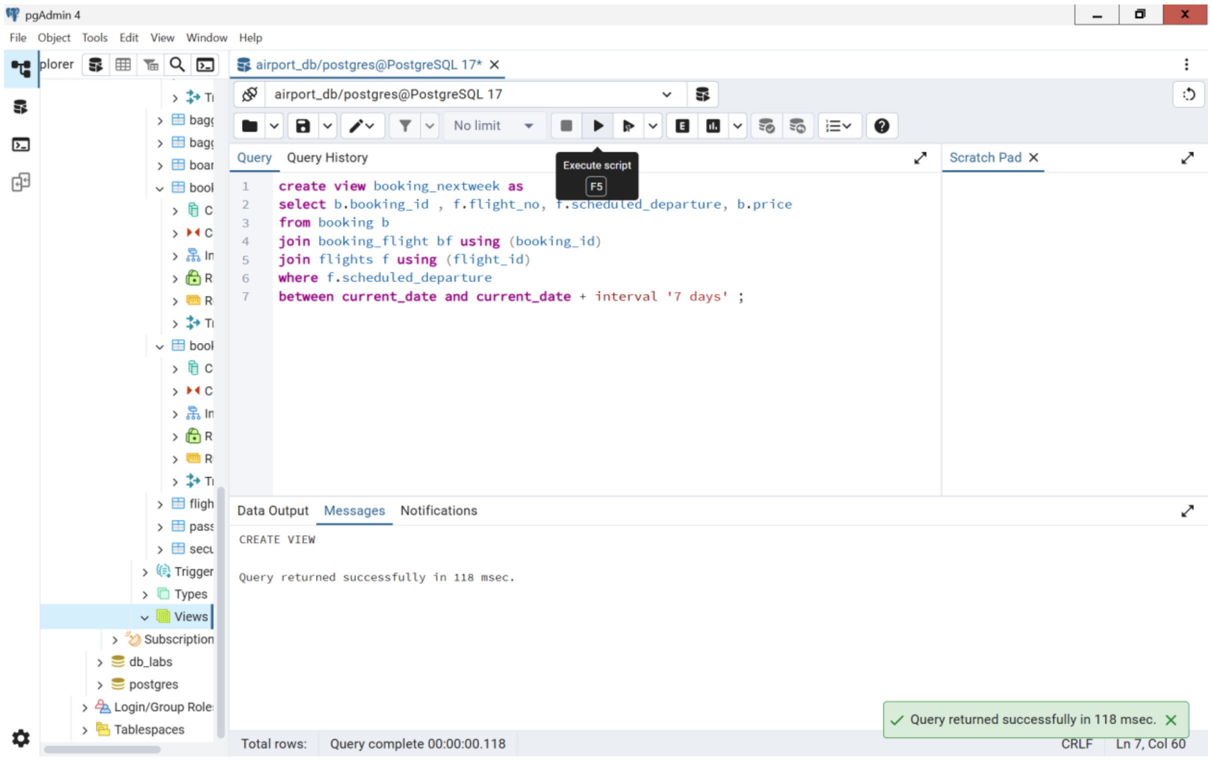
1. Create a view to show details of all flights that are departing on a specific date.



```
--task 1
create view flight_details as
select * from flights
where actual_departure = '2024-01-01' ;
```

```
                                             select * from flights
                                             where actual_departure = '2023-43-32'
[2025-11-16 15:49:48] [22008] ОШИБКА: значение поля типа date/time вне диапазона: "2023-43-32"
[2025-11-16 15:49:48] Подсказка: Возможно, вам нужно изменить настройку "datestyle".
[2025-11-16 15:49:48] Позиция: 80
[2025-11-16 15:50:10] airport_db.public> create view flight_details as
                                             select * from flights
                                             where actual_departure = '2024-01-01'
[2025-11-16 15:50:10] completed in 63 ms
```

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



```
create view booking_nextweek as
select b.booking_id , f.flight_no, f.scheduled_departure, b.price
from booking b
join booking_flight bf using (booking_id)
join flights f using (flight_id)
where f.scheduled_departure
between current_date and current_date + interval '7 days' ;
```

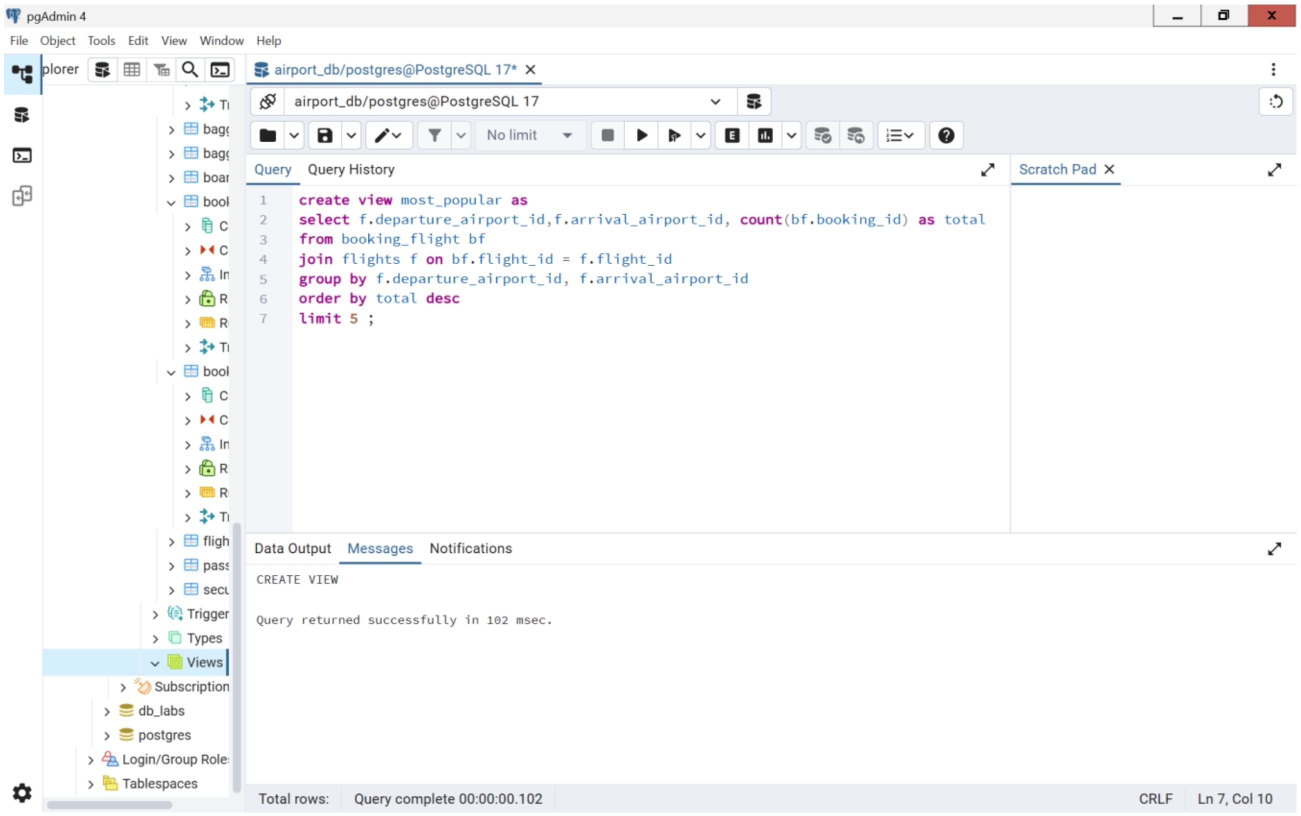
```
CREATE VIEW

Query returned successfully in 118 msec.
```

Query returned successfully in 118 msec.

Total rows: Query complete 00:00:00.118

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



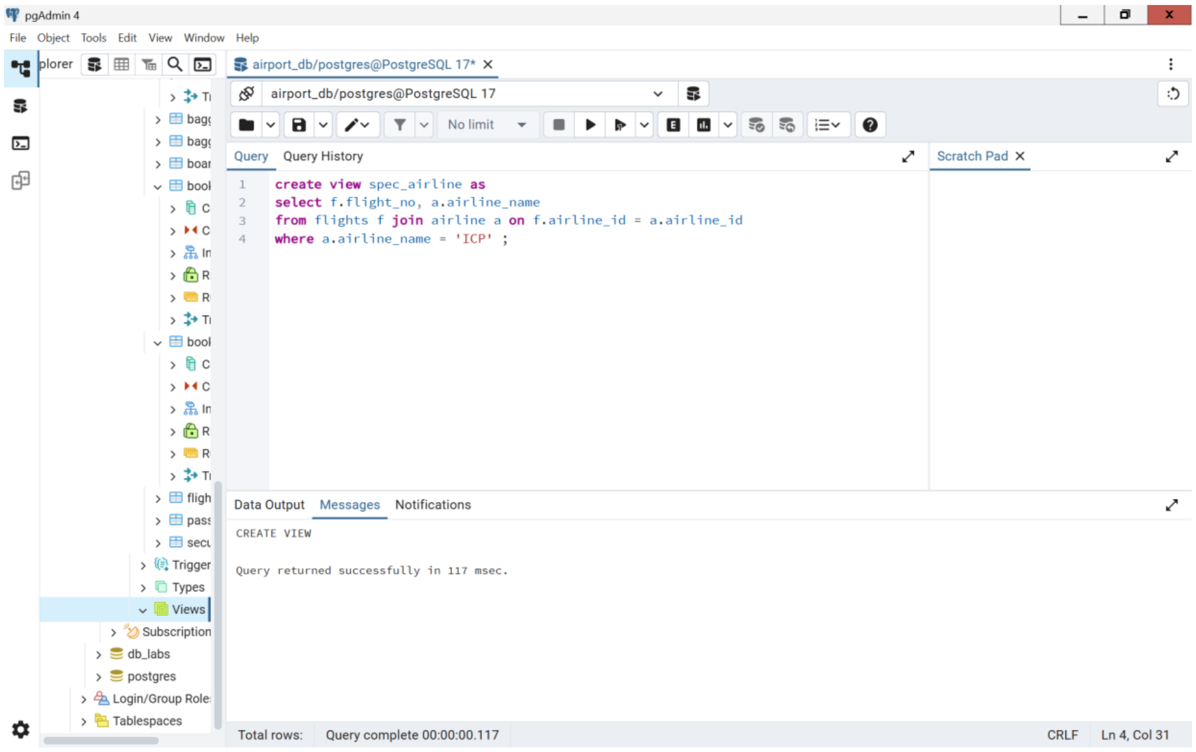
```
create view most_popular as
select f.departure_airport_id,f.arrival_airport_id, count(bf.booking_id) as total
from booking_flight bf
join flights f on bf.flight_id = f.flight_id
group by f.departure_airport_id, f.arrival_airport_id
order by total desc
limit 5 ;
```

```
CREATE VIEW

Query returned successfully in 102 msec.
```

Total rows: Query complete 00:00:00.102 CRLF Ln 7, Col 10

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



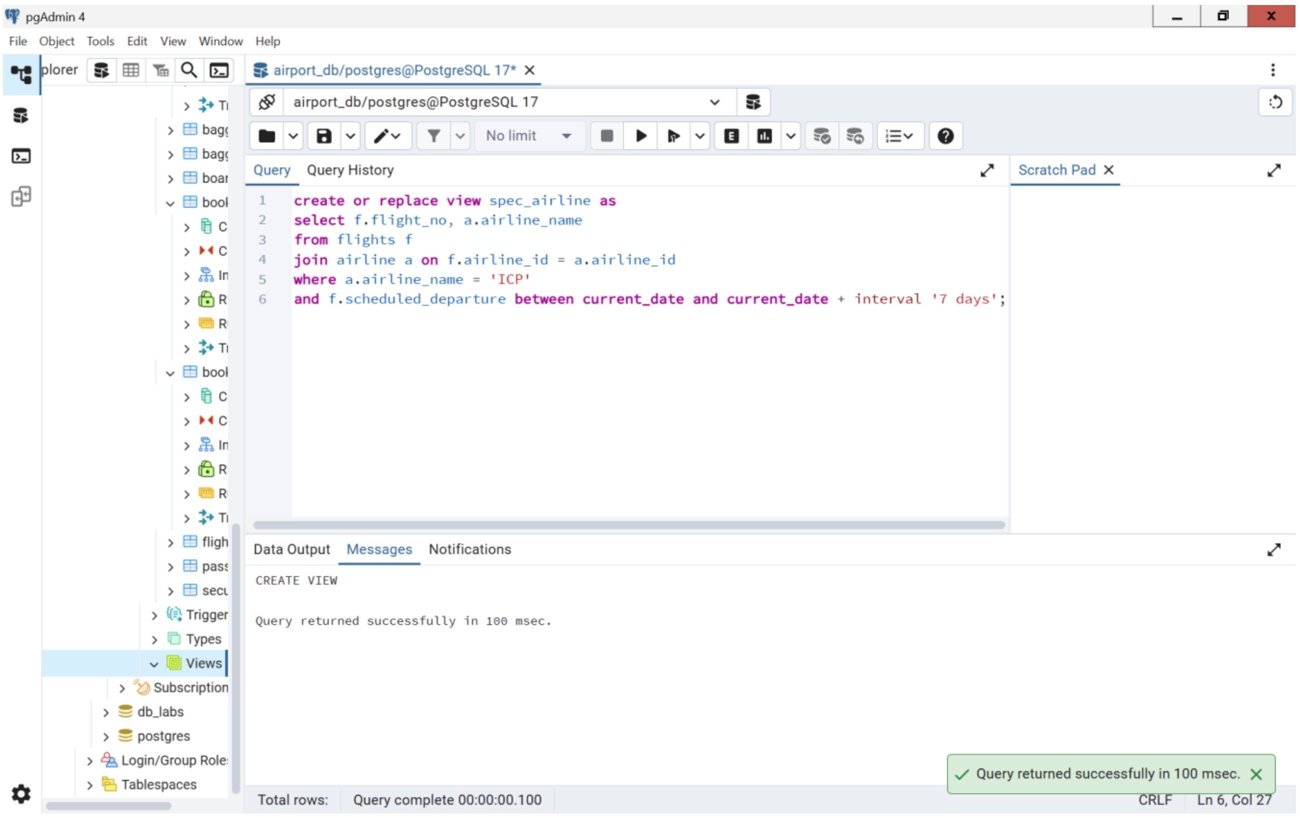
```
create view spec_airline as
select f.flight_no, a.airline_name
from flights f join airline a on f.airline_id = a.airline_id
where a.airline_name = 'ICP' ;
```

```
CREATE VIEW

Query returned successfully in 117 msec.
```

Total rows: Query complete 00:00:00.117 CRLF Ln 4, Col 31

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



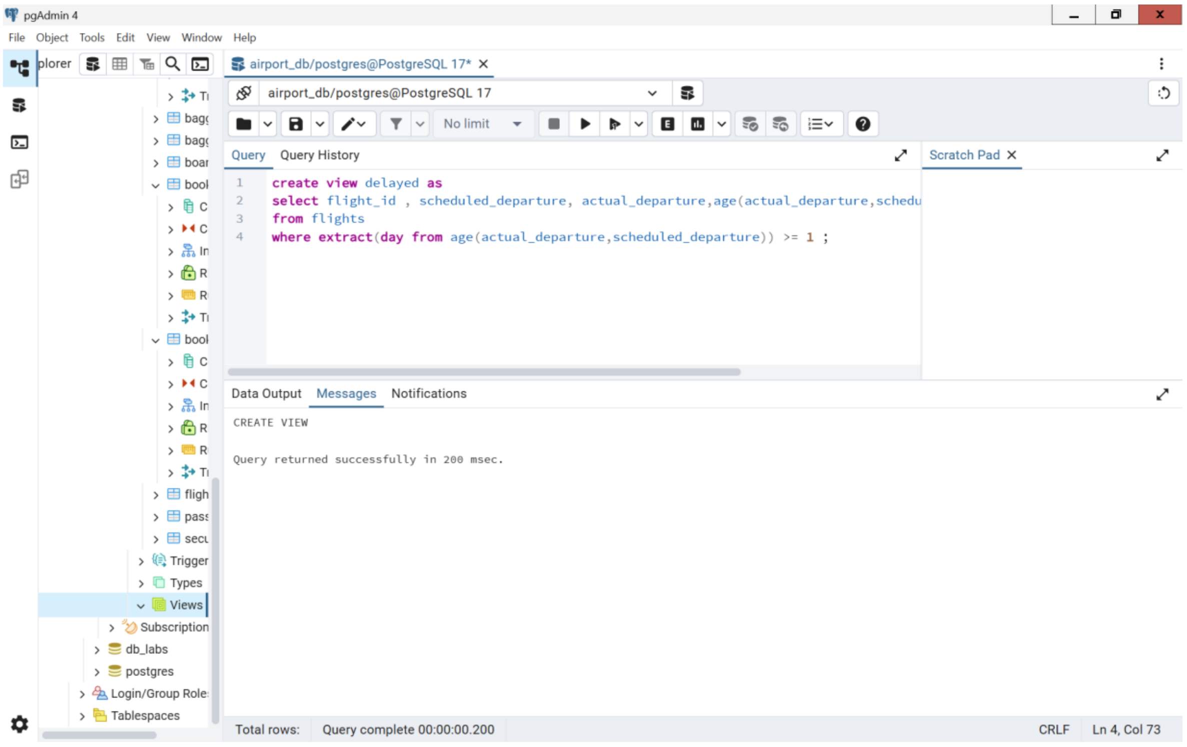
```sql
create or replace view spec_airline as
select f.flight_no, a.airline_name
from flights f
join airline a on f.airline_id = a.airline_id
where a.airline_name = 'ICP'
and f.scheduled_departure between current_date and current_date + interval '7 days';
```

```
CREATE VIEW

Query returned successfully in 100 msec.
```

Total rows: Query complete 00:00:00.100

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



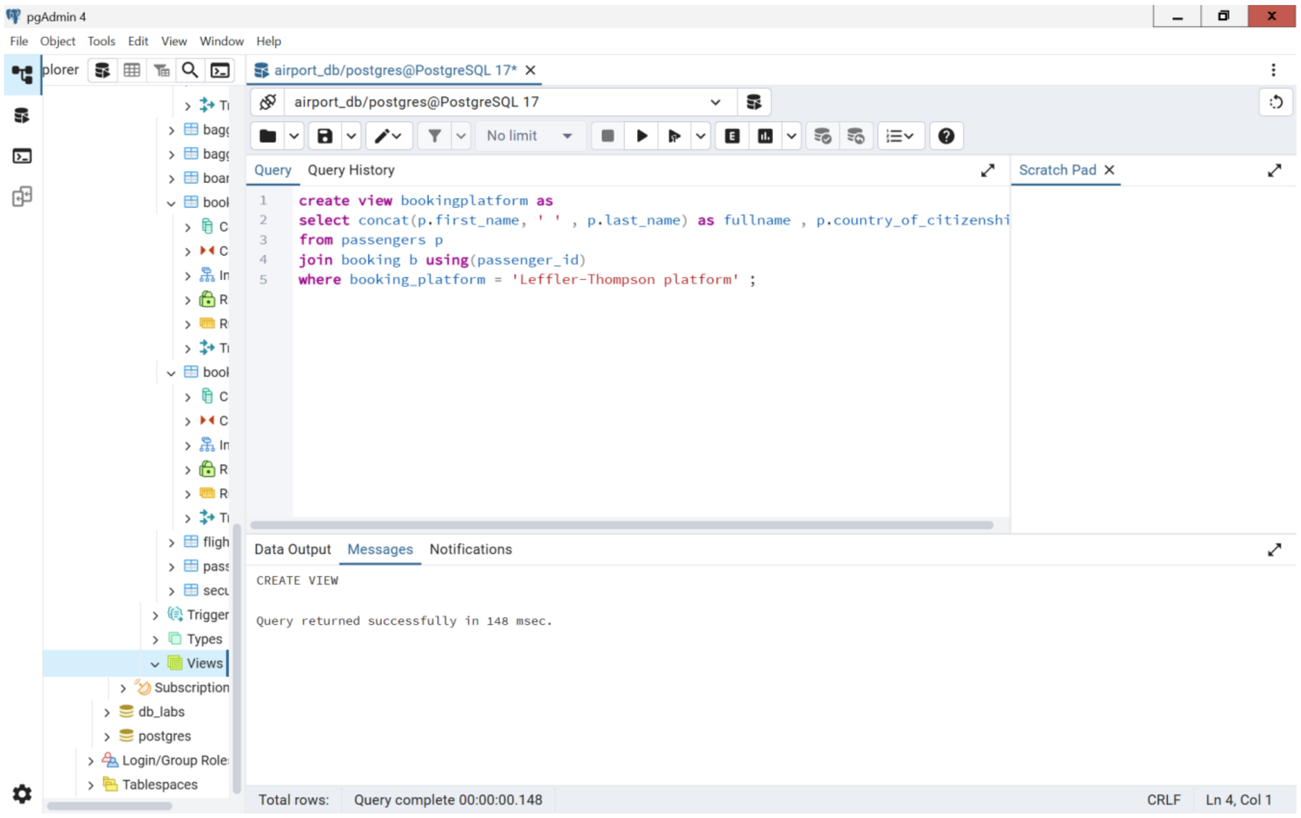
```sql
create view delayed as
select flight_id , scheduled_departure, actual_departure,age(actual_departure,schedu
from flights
where extract(day from age(actual_departure,scheduled_departure)) >= 1 ;
```

```
CREATE VIEW

Query returned successfully in 200 msec.
```

Total rows: Query complete 00:00:00.200

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.

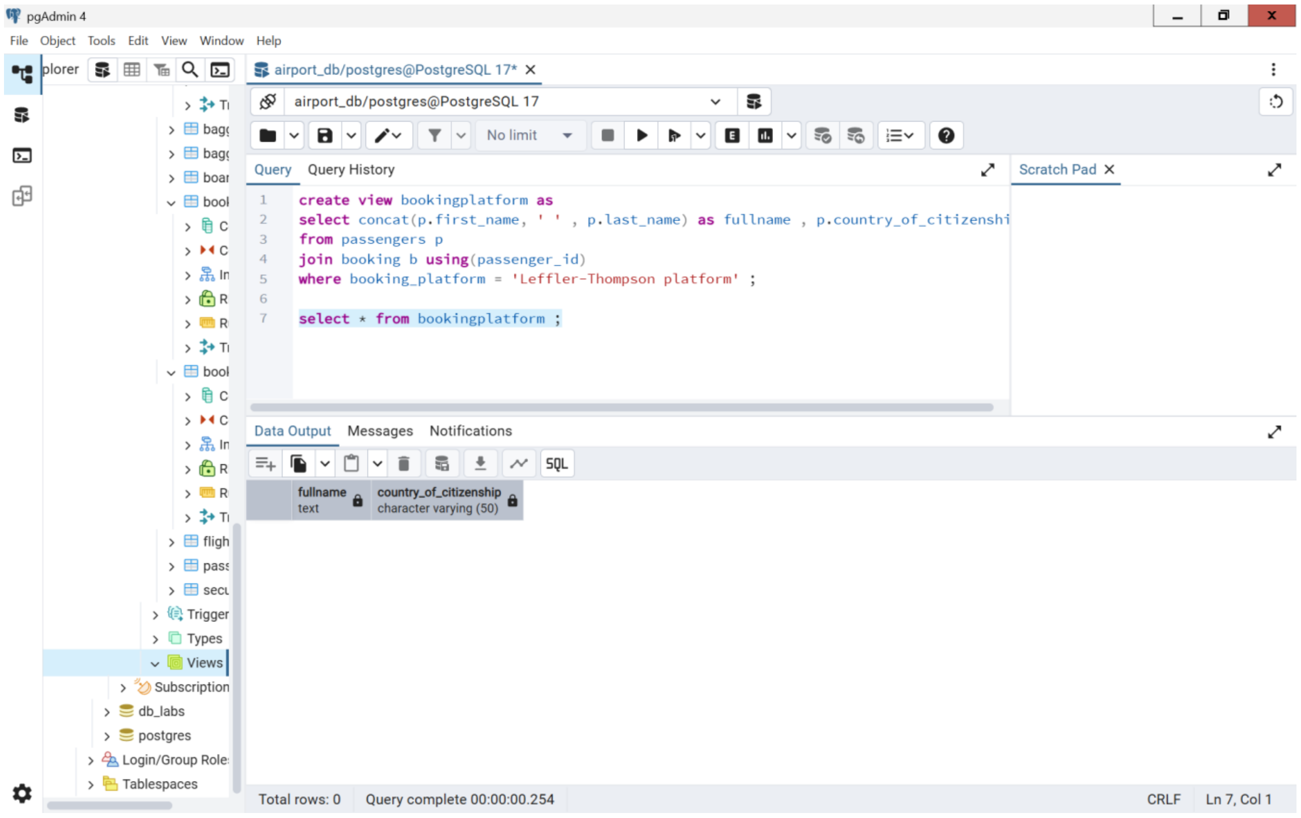


```
create view bookingplatform as
select concat(p.first_name, ' ' , p.last_name) as fullname , p.country_of_citizenshi
from passengers p
join booking b using(passenger_id)
where booking_platform = 'Leffler-Thompson platform' ;
```

```
CREATE VIEW

Query returned successfully in 148 msec.
```

Total rows: Query complete 00:00:00.148



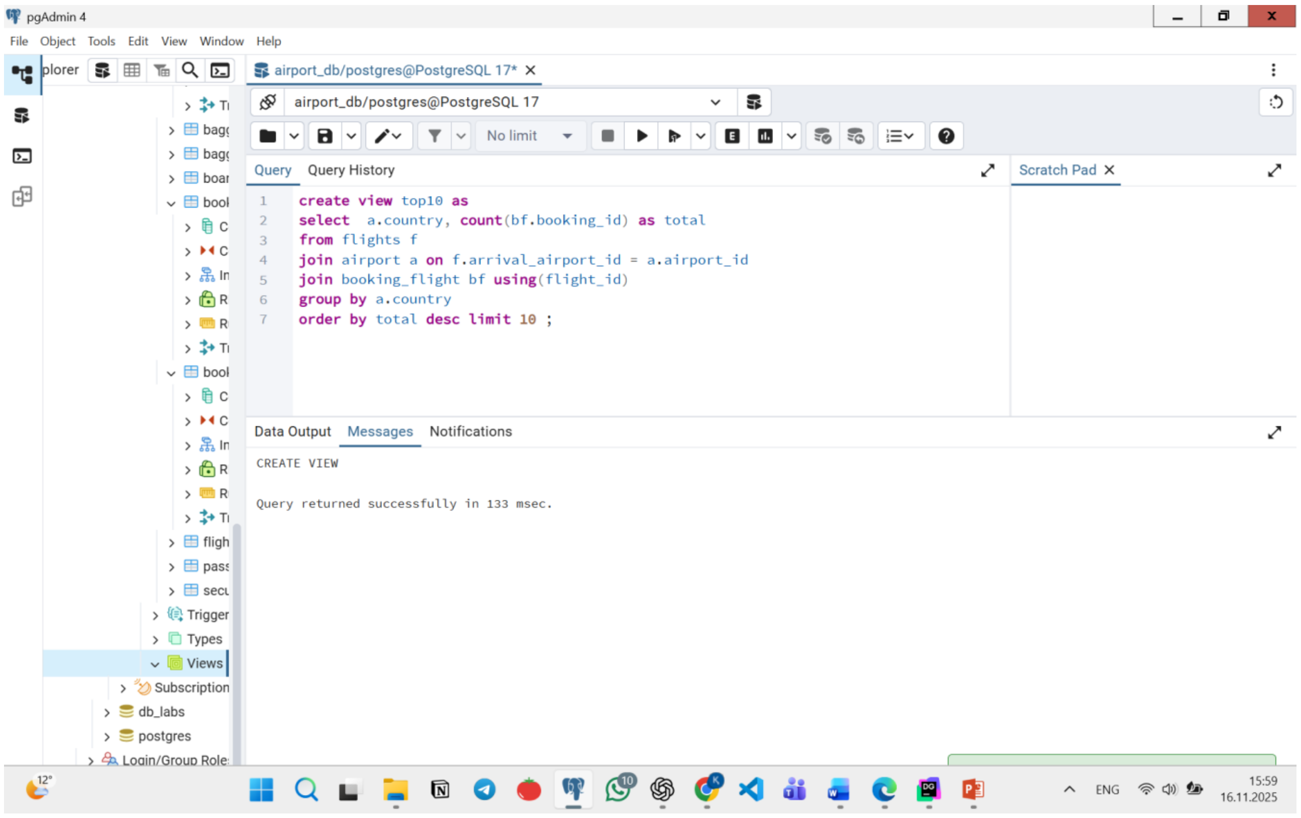
```
create view bookingplatform as
select concat(p.first_name, ' ' , p.last_name) as fullname , p.country_of_citizenshi
from passengers p
join booking b using(passenger_id)
where booking_platform = 'Leffler-Thompson platform' ;

select * from bookingplatform ;
```

fullname text	country_of_citizenship character varying (50)

Total rows: 0 Query complete 00:00:00.254

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

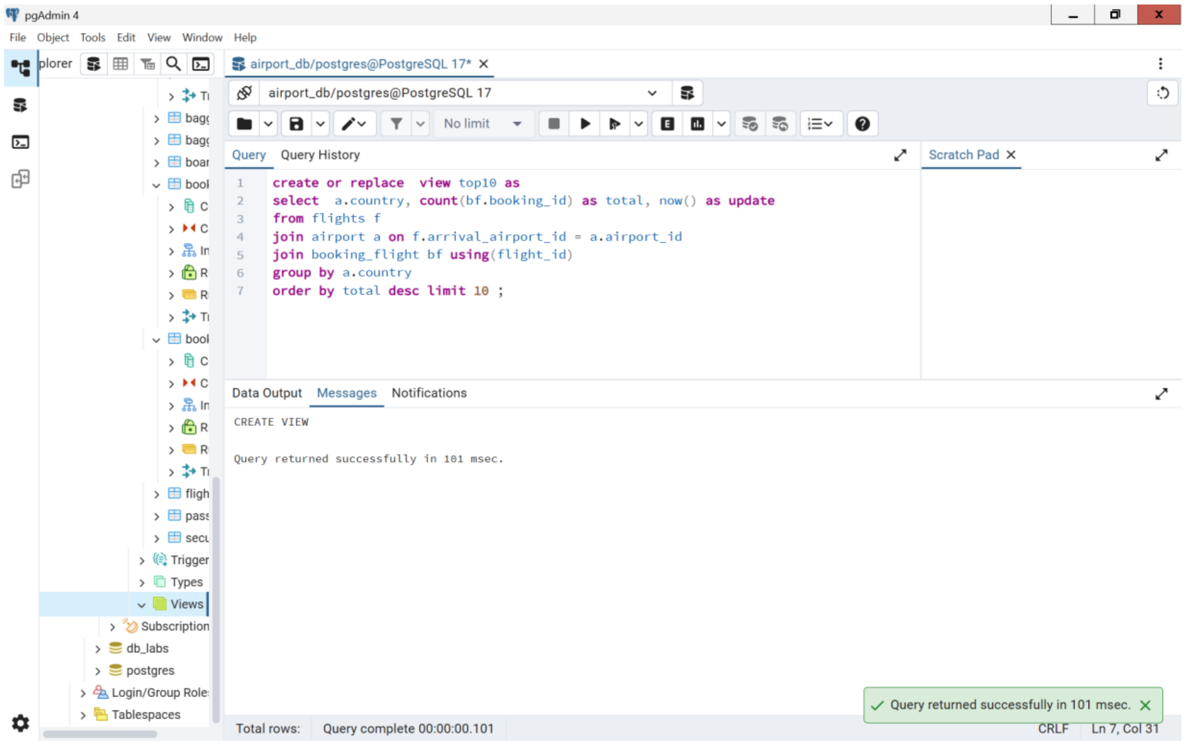


```
create view top10 as
select  a.country, count(bf.booking_id) as total
from flights f
join airport a on f.arrival_airport_id = a.airport_id
join booking_flight bf using(flight_id)
group by a.country
order by total desc limit 10 ;
```

```
CREATE VIEW

Query returned successfully in 133 msec.
```

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

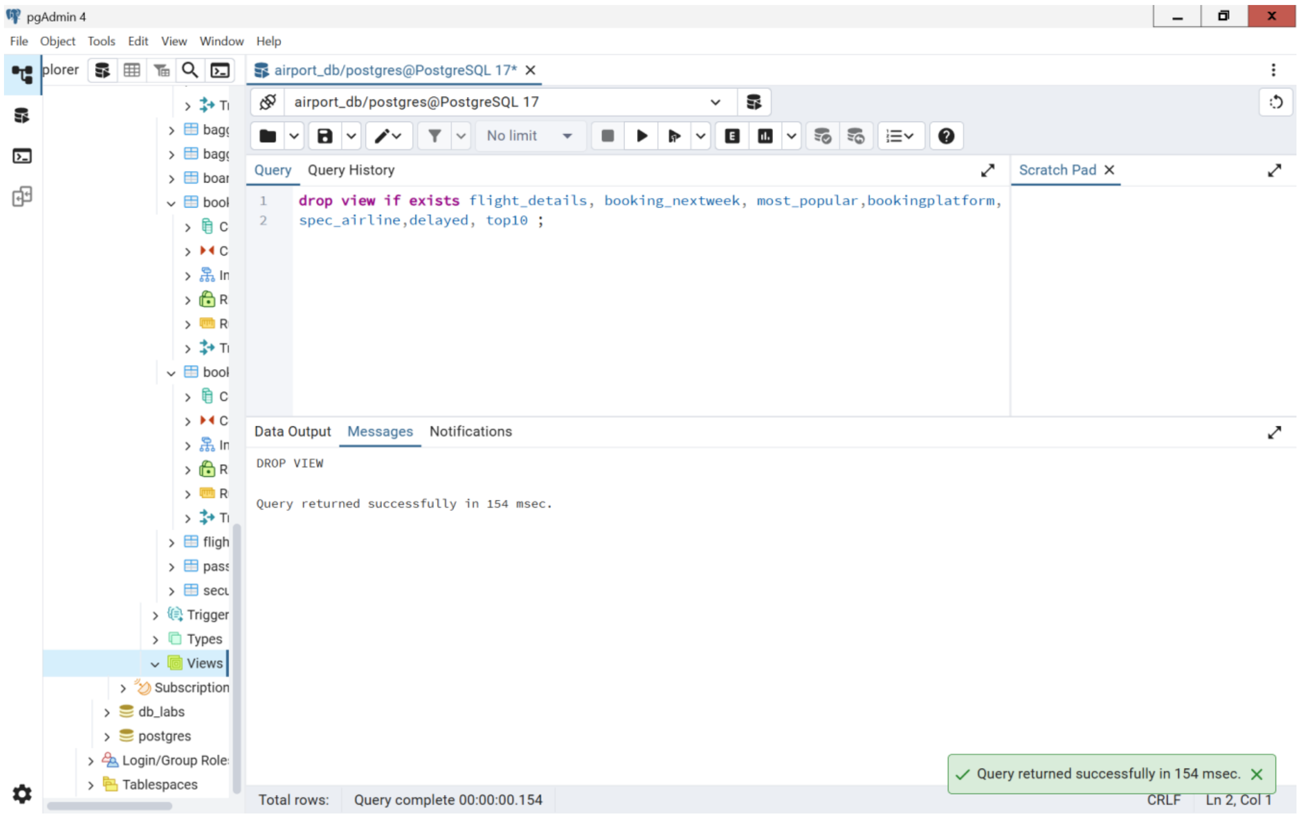


```
create or replace  view top10 as
select  a.country, count(bf.booking_id) as total, now() as update
from flights f
join airport a on f.arrival_airport_id = a.airport_id
join booking_flight bf using(flight_id)
group by a.country
order by total desc limit 10 ;
```

```
CREATE VIEW

Query returned successfully in 101 msec.
```

10. Drop all existing views.


pgAdmin 4
File Object Tools Edit View Window Help
airport_db/postgres@PostgreSQL 17*
airport_db/postgres@PostgreSQL 17
No limit
Query Query History
Scratch Pad
Data Output Messages Notifications
Trigger
Types
Views
Subscription
db_labs
postgres
Login/Group Role
Tablespaces

```sql
drop view if exists flight_details, booking_nextweek, most_popular,bookingplatform,
spec_airline,delayed, top10 ;
```

```
DROP VIEW

Query returned successfully in 154 msec.
```

Query returned successfully in 154 msec.

Total rows: Query complete 00:00:00.154 CRLF Ln 2, Col 1