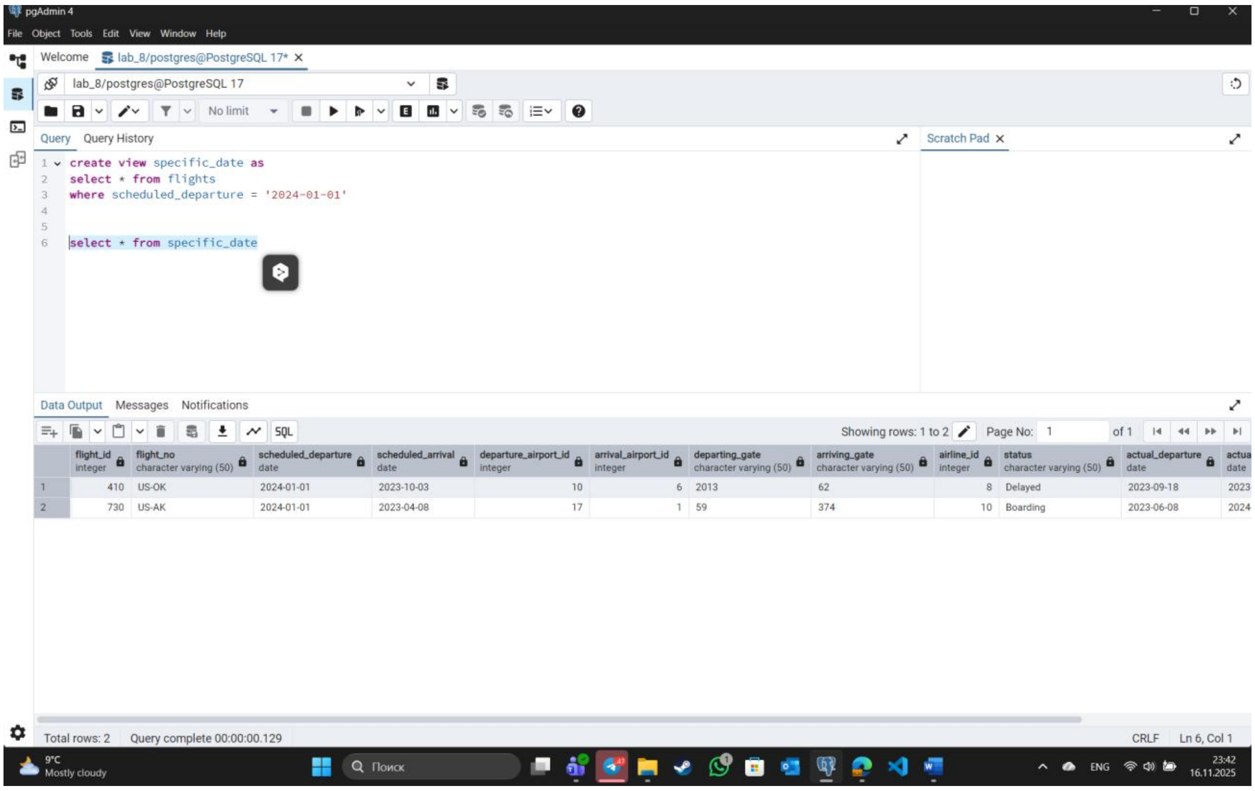
1. Create a view to show details of all flights that are departing on a specific date.

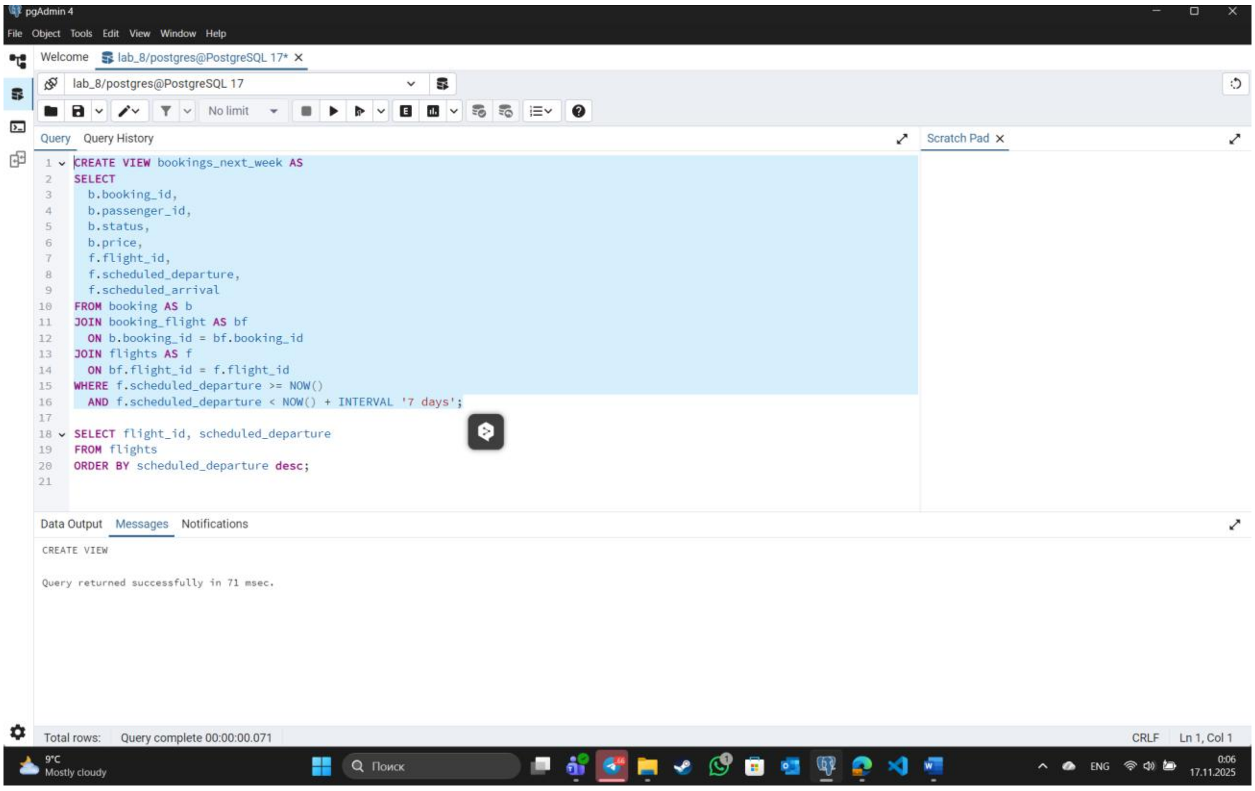


```sql
create view specific_date as
select * from flights
where scheduled_departure = '2024-01-01'


select * from specific_date
```

	flight_id integer	flight_no character varying (50)	scheduled_departure date	scheduled_arrival date	departure_airport_id integer	arrival_airport_id integer	departing_gate character varying (50)	arriving_gate character varying (50)	airline_id integer	status character varying (50)	actual_departure date	actua date
1	410	US-OK	2024-01-01	2023-10-03	10	6	2013	62	8	Delayed	2023-09-18	2023
2	730	US-AK	2024-01-01	2023-04-08	17	1	59	374	10	Boarding	2023-06-08	2024

Total rows: 2 Query complete 00:00:00.129

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

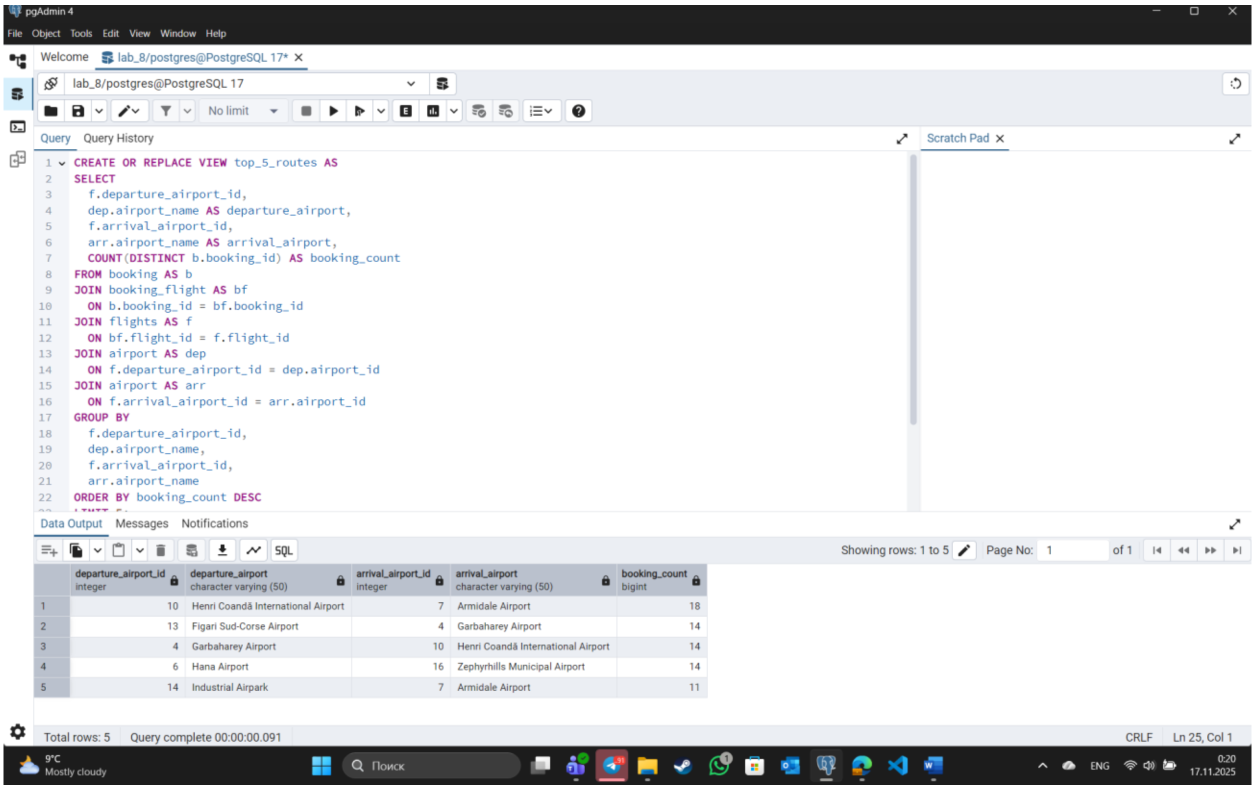


```sql
CREATE VIEW bookings_next_week AS
SELECT
  b.booking_id,
  b.passenger_id,
  b.status,
  b.price,
  f.flight_id,
  f.scheduled_departure,
  f.scheduled_arrival
FROM booking AS b
JOIN booking_flight AS bf
  ON b.booking_id = bf.booking_id
JOIN flights AS f
  ON bf.flight_id = f.flight_id
WHERE f.scheduled_departure >= NOW()
  AND f.scheduled_departure < NOW() + INTERVAL '7 days';

SELECT flight_id, scheduled_departure
FROM flights
ORDER BY scheduled_departure desc;
```

```
CREATE VIEW

Query returned successfully in 71 msec.
```

Total rows: Query complete 00:00:00.071

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



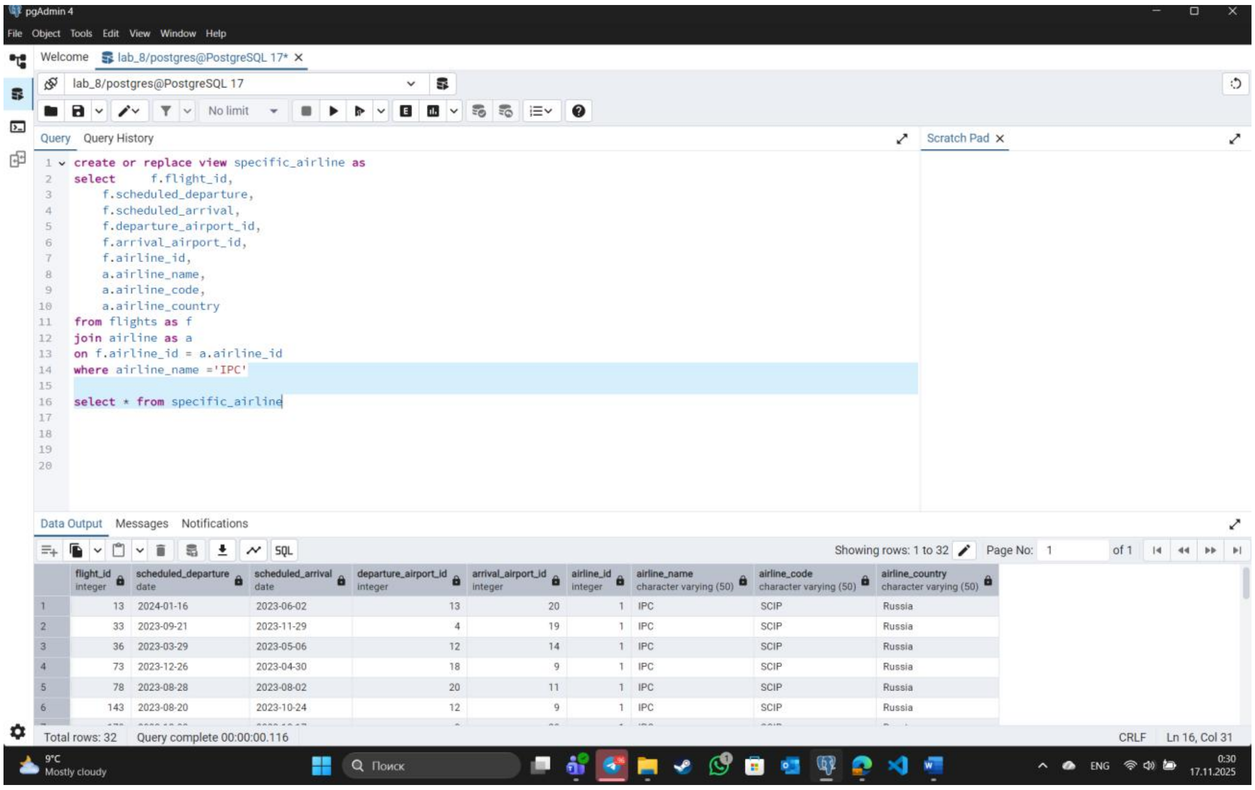
```sql
CREATE OR REPLACE VIEW top_5_routes AS
SELECT
  f.departure_airport_id,
  dep.airport_name AS departure_airport,
  f.arrival_airport_id,
  arr.airport_name AS arrival_airport,
  COUNT(DISTINCT b.booking_id) AS booking_count
FROM booking AS b
JOIN booking_flight AS bf
  ON b.booking_id = bf.booking_id
JOIN flights AS f
  ON bf.flight_id = f.flight_id
JOIN airport AS dep
  ON f.departure_airport_id = dep.airport_id
JOIN airport AS arr
  ON f.arrival_airport_id = arr.airport_id
GROUP BY
  f.departure_airport_id,
  dep.airport_name,
  f.arrival_airport_id,
  arr.airport_name
ORDER BY booking_count DESC
```

	departure_airport_id integer	departure_airport character varying (50)	arrival_airport_id integer	arrival_airport character varying (50)	booking_count bigint
1	10	Henri Coandă International Airport	7	Armidale Airport	18
2	13	Figari Sud-Corse Airport	4	Garbaharey Airport	14
3	4	Garbaharey Airport	10	Henri Coandă International Airport	14
4	6	Hana Airport	16	Zephyrhills Municipal Airport	14
5	14	Industrial Airpark	7	Armidale Airport	11

Showing rows: 1 to 5 Page No: 1 of 1

Total rows: 5 Query complete 00:00:00.091

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



```sql
create or replace view specific_airline as
select      f.flight_id,
    f.scheduled_departure,
    f.scheduled_arrival,
    f.departure_airport_id,
    f.arrival_airport_id,
    f.airline_id,
    a.airline_name,
    a.airline_code,
    a.airline_country
from flights as f
join airline as a
on f.airline_id = a.airline_id
where airline_name ='IPC'

select * from specific_airline
```

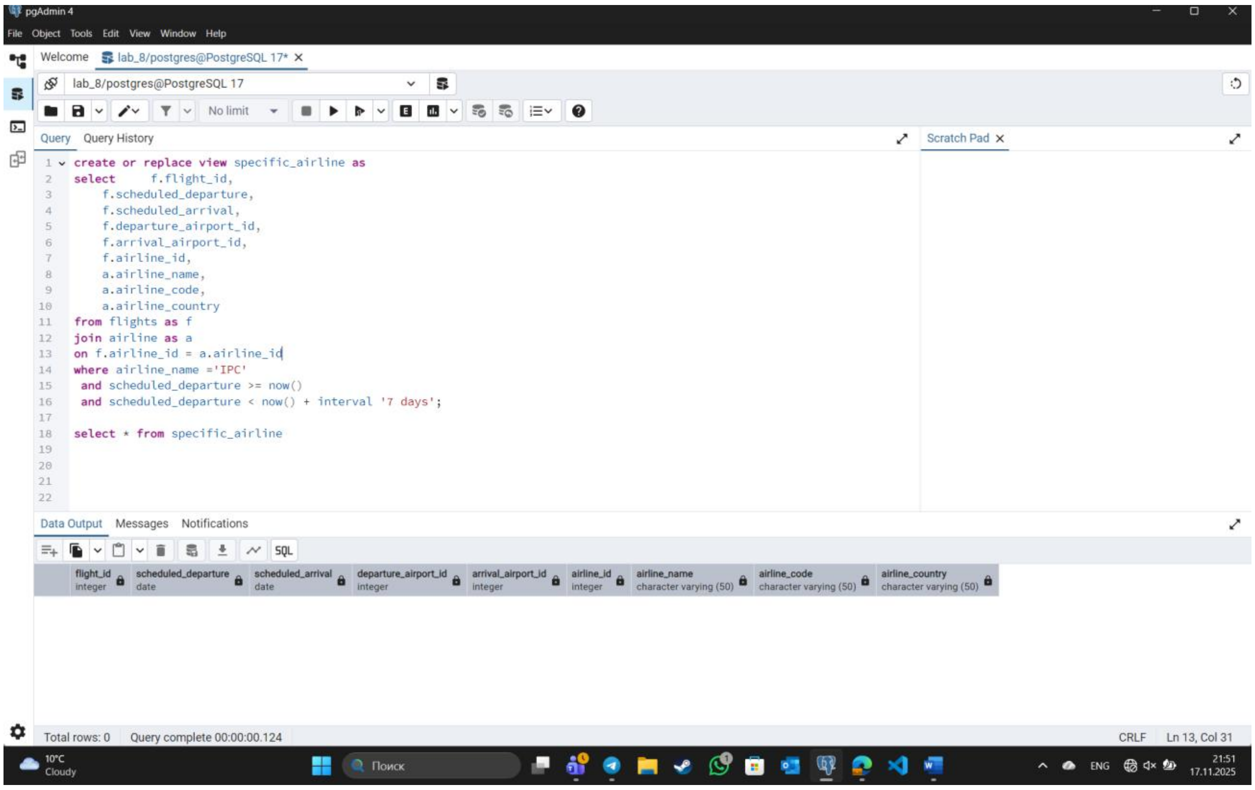
	flight_id integer	scheduled_departure date	scheduled_arrival date	departure_airport_id integer	arrival_airport_id integer	airline_id integer	airline_name character varying (50)	airline_code character varying (50)	airline_country character varying (50)
1	13	2024-01-16	2023-06-02	13	20	1	IPC	SCIP	Russia
2	33	2023-09-21	2023-11-29	4	19	1	IPC	SCIP	Russia
3	36	2023-03-29	2023-05-06	12	14	1	IPC	SCIP	Russia
4	73	2023-12-26	2023-04-30	18	9	1	IPC	SCIP	Russia
5	78	2023-08-28	2023-08-02	20	11	1	IPC	SCIP	Russia
6	143	2023-08-20	2023-10-24	12	9	1	IPC	SCIP	Russia

Showing rows: 1 to 32 Page No: 1 of 1

Total rows: 32 Query complete 00:00:00.116

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

-

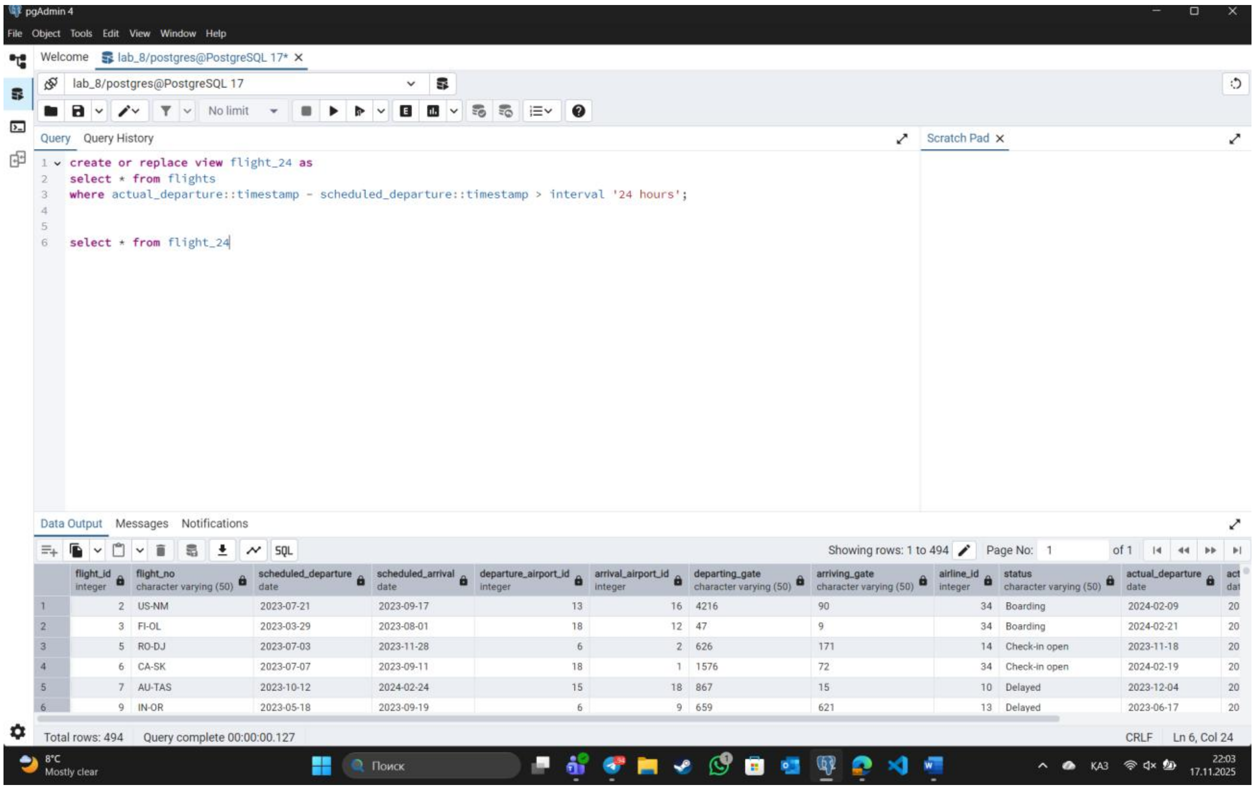


```sql
create or replace view specific_airline as
select      f.flight_id,
    f.scheduled_departure,
    f.scheduled_arrival,
    f.departure_airport_id,
    f.arrival_airport_id,
    f.airline_id,
    a.airline_name,
    a.airline_code,
    a.airline_country
from flights as f
join airline as a
on f.airline_id = a.airline_id
where airline_name ='IPC'
 and scheduled_departure >= now()
 and scheduled_departure < now() + interval '7 days';

select * from specific_airline
```

flight_id integer	scheduled_departure date	scheduled_arrival date	departure_airport_id integer	arrival_airport_id integer	airline_id integer	airline_name character varying (50)	airline_code character varying (50)	airline_country character varying (50)

Total rows: 0 Query complete 00:00:00.124

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



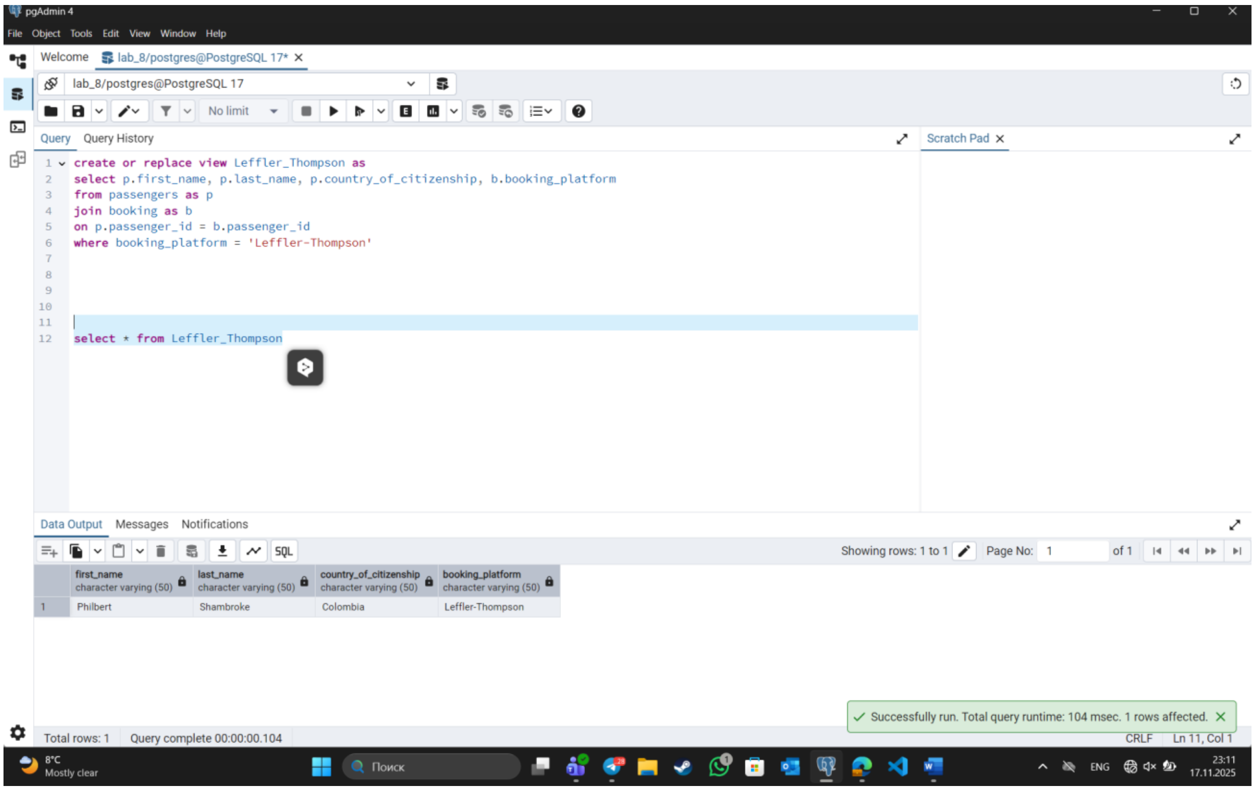
```sql
create or replace view flight_24 as
select * from flights
where actual_departure::timestamp - scheduled_departure::timestamp > interval '24 hours';


select * from flight_24
```

Showing rows: 1 to 494 Page No: 1 of 1

	flight_id integer	flight_no character varying (50)	scheduled_departure date	scheduled_arrival date	departure_airport_id integer	arrival_airport_id integer	departing_gate character varying (50)	arriving_gate character varying (50)	airline_id integer	status character varying (50)	actual_departure date	act dat
1	2	US-NM	2023-07-21	2023-09-17	13	16	4216	90	34	Boarding	2024-02-09	20
2	3	FI-OL	2023-03-29	2023-08-01	18	12	47	9	34	Boarding	2024-02-21	20
3	5	RO-DJ	2023-07-03	2023-11-28	6	2	626	171	14	Check-in open	2023-11-18	20
4	6	CA-SK	2023-07-07	2023-09-11	18	1	1576	72	34	Check-in open	2024-02-19	20
5	7	AU-TAS	2023-10-12	2024-02-24	15	18	867	15	10	Delayed	2023-12-04	20
6	9	IN-OR	2023-05-18	2023-09-19	6	9	659	621	13	Delayed	2023-06-17	20

Total rows: 494 Query complete 00:00:00.127

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.



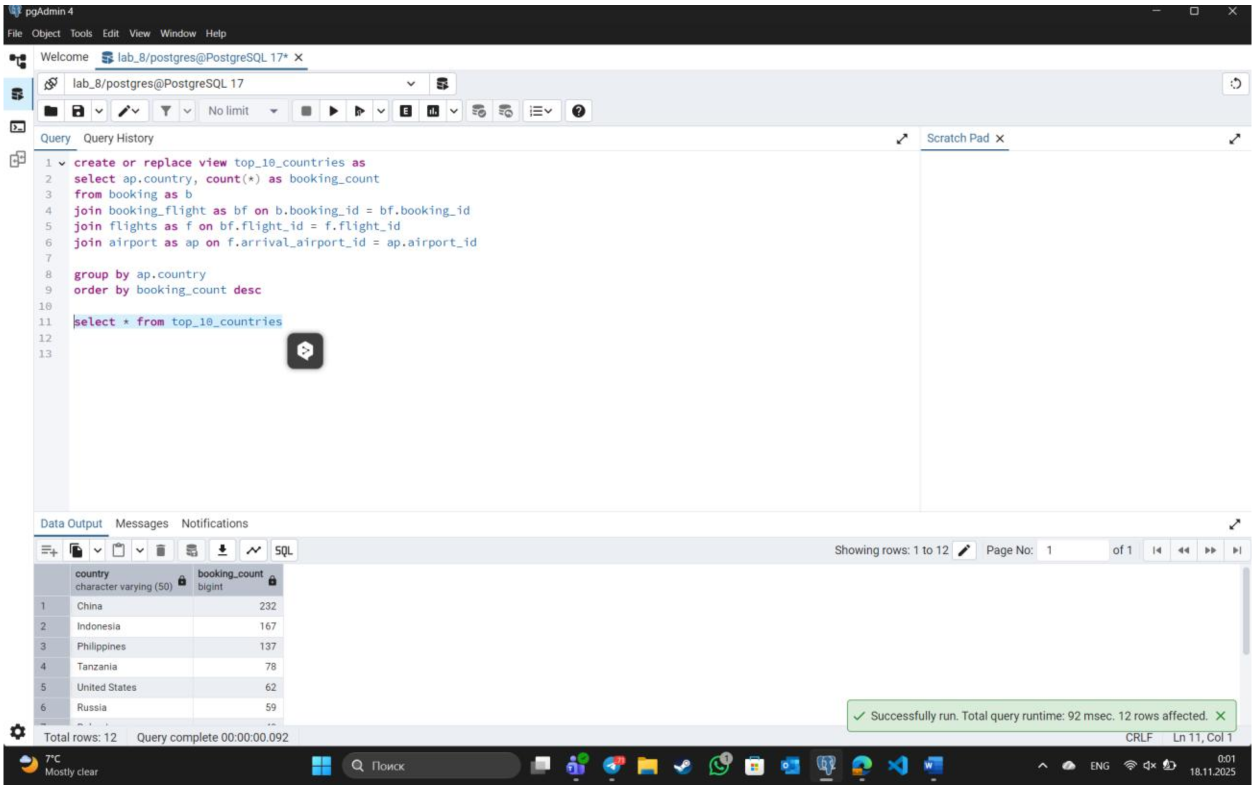
```sql
create or replace view Leffler_Thompson as
select p.first_name, p.last_name, p.country_of_citizenship, b.booking_platform
from passengers as p
join booking as b
on p.passenger_id = b.passenger_id
where booking_platform = 'Leffler-Thompson'




select * from Leffler_Thompson
```

	first_name character varying (50)	last_name character varying (50)	country_of_citizenship character varying (50)	booking_platform character varying (50)
1	Philbert	Shambroke	Colombia	Leffler-Thompson

Successfully run. Total query runtime: 104 msec. 1 rows affected.

Total rows: 1 Query complete 00:00:00.104

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



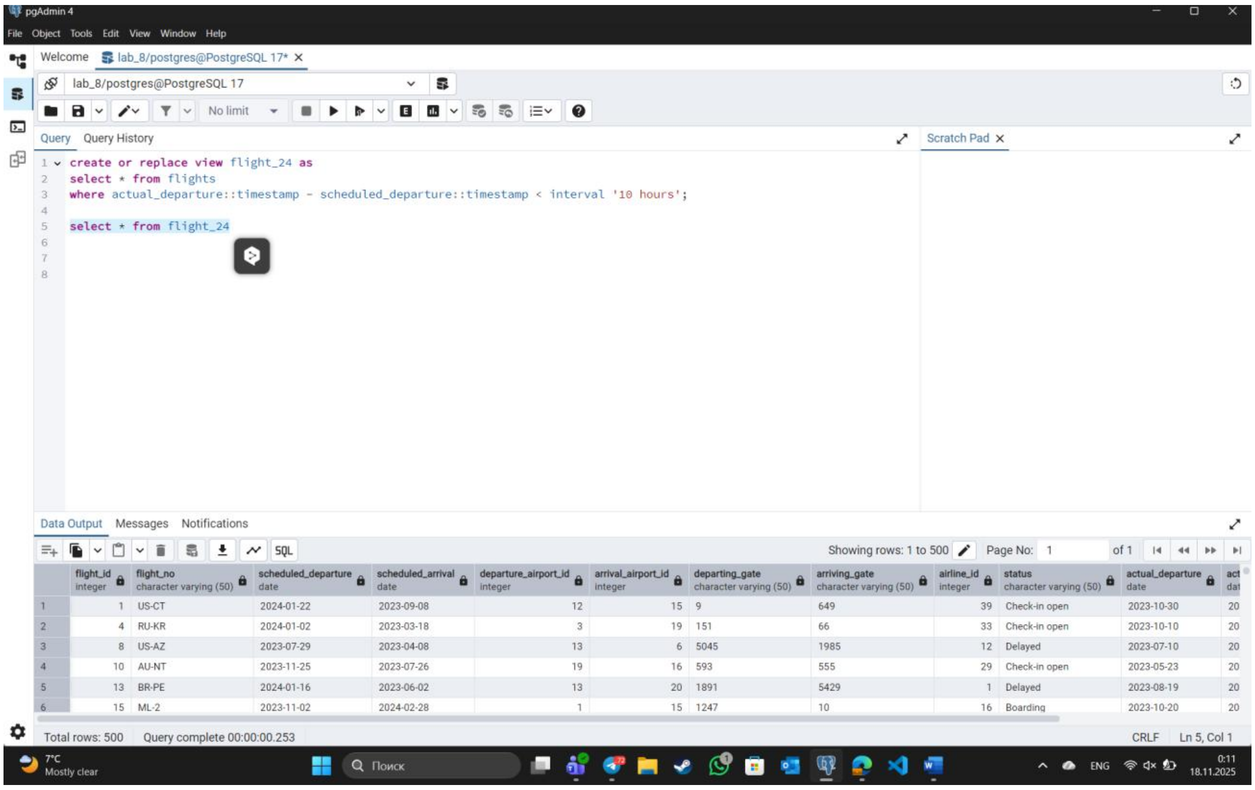
```sql
create or replace view top_10_countries as
select ap.country, count(*) as booking_count
from booking as b
join booking_flight as bf on b.booking_id = bf.booking_id
join flights as f on bf.flight_id = f.flight_id
join airport as ap on f.arrival_airport_id = ap.airport_id

group by ap.country
order by booking_count desc

select * from top_10_countries
```

	country character varying (50)	booking_count bigint
1	China	232
2	Indonesia	167
3	Philippines	137
4	Tanzania	78
5	United States	62
6	Russia	59

Successfully run. Total query runtime: 92 msec. 12 rows affected.

Total rows: 12 Query complete 00:00:00.092

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



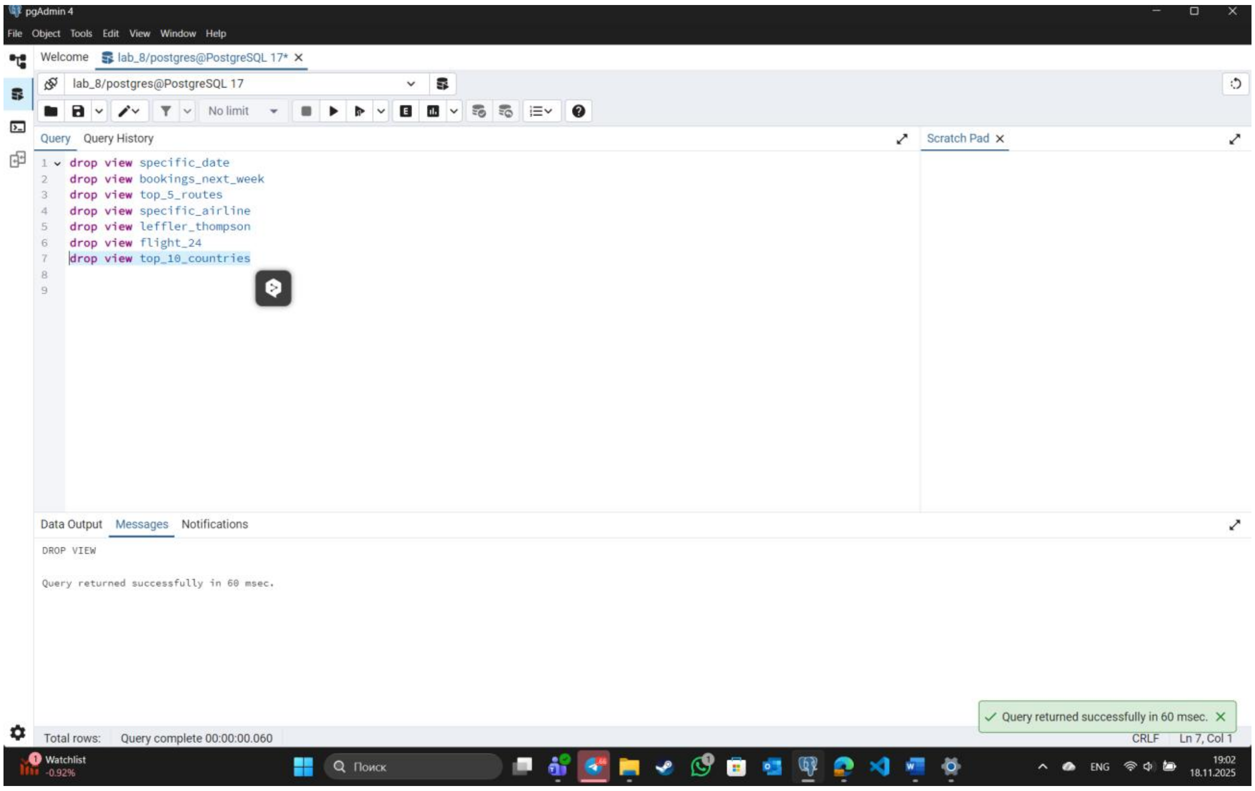
```
create or replace view flight_24 as
select * from flights
where actual_departure::timestamp - scheduled_departure::timestamp < interval '10 hours';

select * from flight_24
```

Showing rows: 1 to 500 Page No: 1 of 1

	flight_id integer	flight_no character varying (50)	scheduled_departure date	scheduled_arrival date	departure_airport_id integer	arrival_airport_id integer	departing_gate character varying (50)	arriving_gate character varying (50)	airline_id integer	status character varying (50)	actual_departure date	act dat
1	1	US-CT	2024-01-22	2023-09-08	12	15	9	649	39	Check-in open	2023-10-30	20
2	4	RU-KR	2024-01-02	2023-03-18	3	19	151	66	33	Check-in open	2023-10-10	20
3	8	US-AZ	2023-07-29	2023-04-08	13	6	5045	1985	12	Delayed	2023-07-10	20
4	10	AU-NT	2023-11-25	2023-07-26	19	16	593	555	29	Check-in open	2023-05-23	20
5	13	BR-PE	2024-01-16	2023-06-02	13	20	1891	5429	1	Delayed	2023-08-19	20
6	15	ML-2	2023-11-02	2024-02-28	1	15	1247	10	16	Boarding	2023-10-20	20

Total rows: 500 Query complete 00:00:00.253

6. Drop all existing views.



```
drop view specific_date
drop view bookings_next_week
drop view top_5_routes
drop view specific_airline
drop view leffler_thompson
drop view flight_24
drop view top_10_countries
```

```
DROP VIEW

Query returned successfully in 60 msec.
```

Query returned successfully in 60 msec.

Total rows: Query complete 00:00:00.060