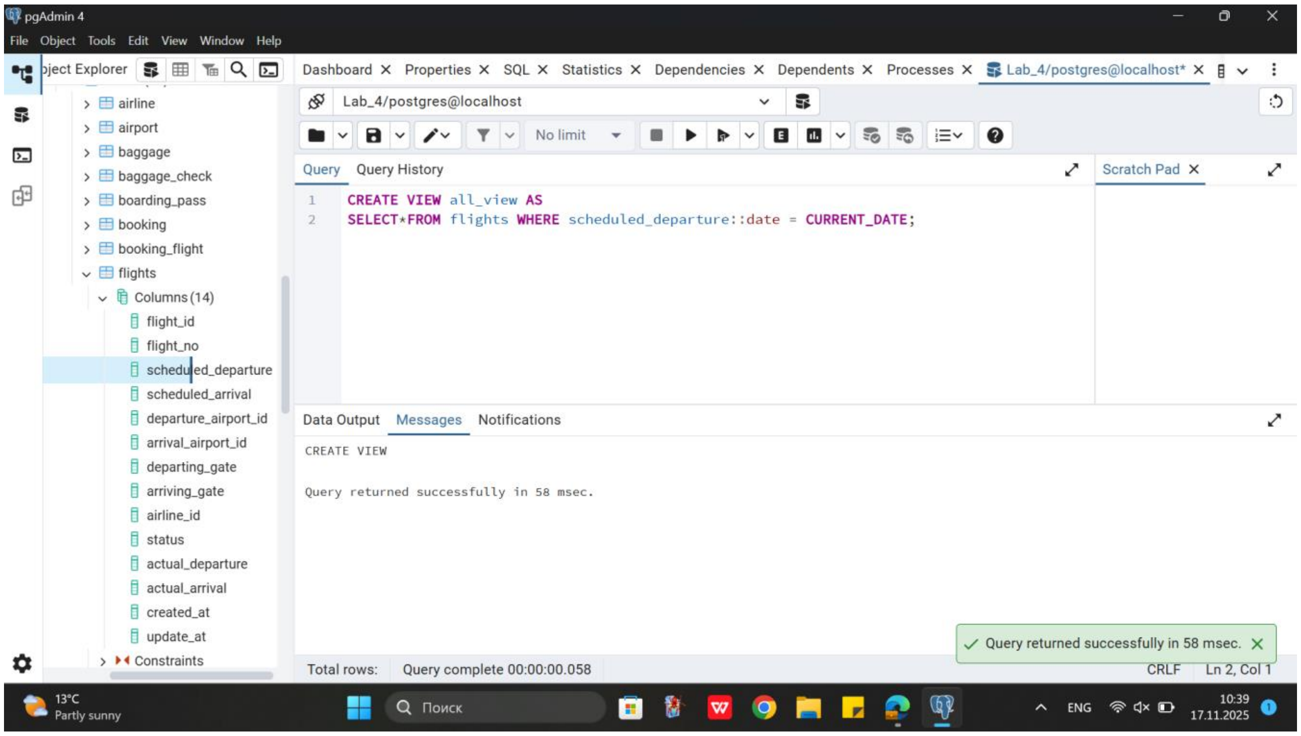
# Laboratory work 8

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



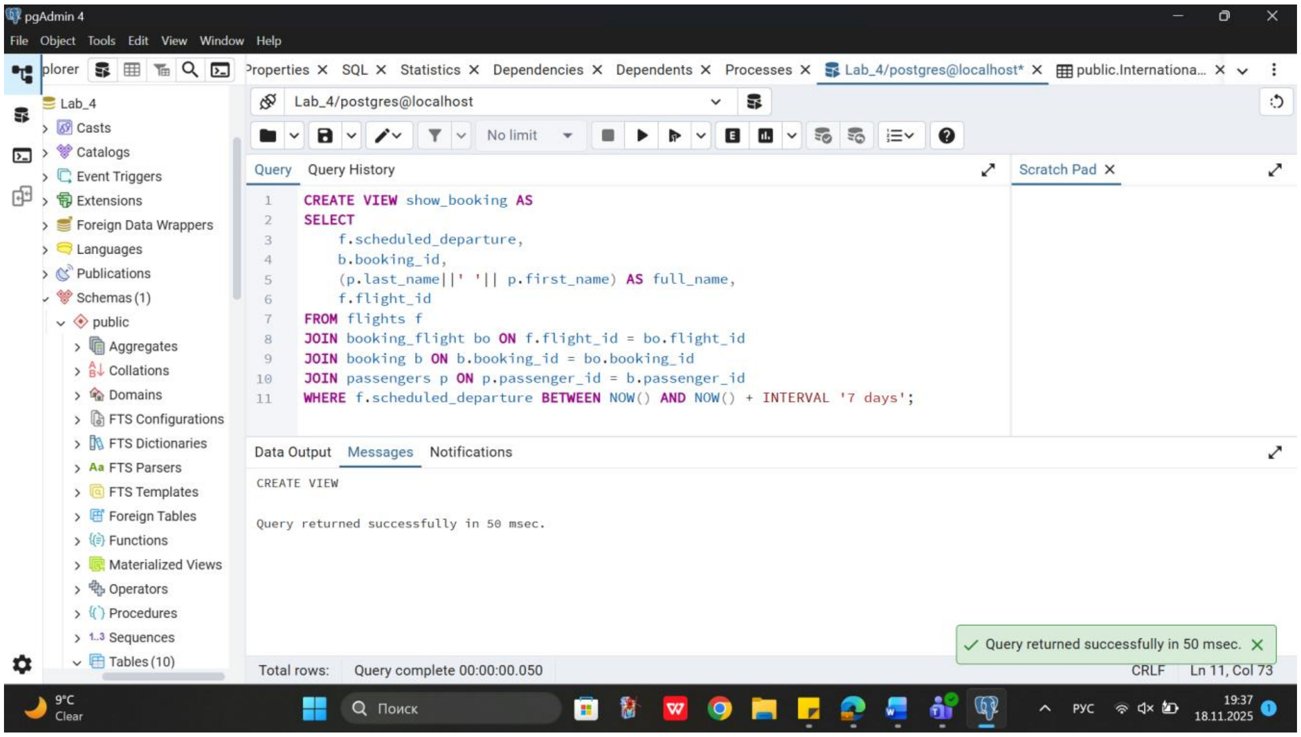
```sql
CREATE VIEW all_view AS
SELECT*FROM flights WHERE scheduled_departure::date = CURRENT_DATE;
```

```
CREATE VIEW

Query returned successfully in 58 msec.
```

Total rows: Query complete 00:00:00.058

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



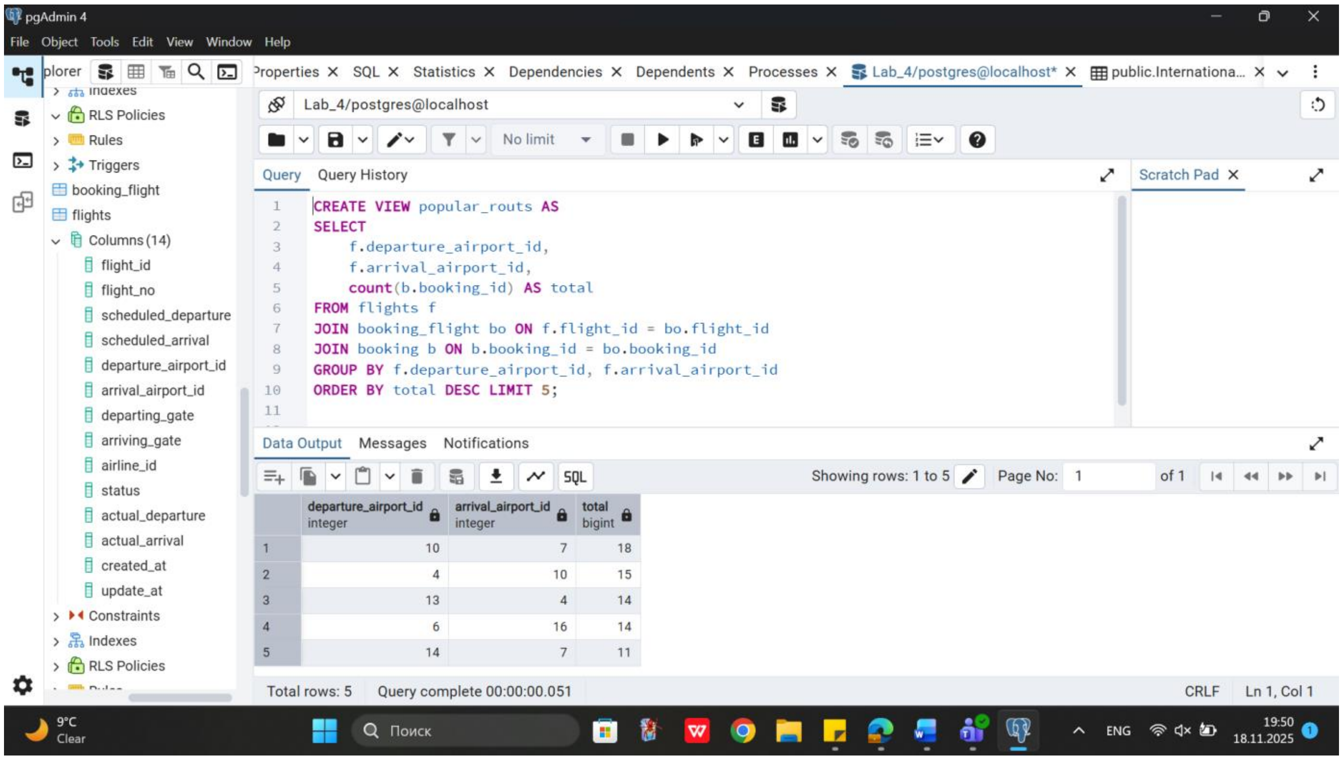
```sql
CREATE VIEW show_booking AS
SELECT
    f.scheduled_departure,
    b.booking_id,
    (p.last_name||' '|| p.first_name) AS full_name,
    f.flight_id
FROM flights f
JOIN booking_flight bo ON f.flight_id = bo.flight_id
JOIN booking b ON b.booking_id = bo.booking_id
JOIN passengers p ON p.passenger_id = b.passenger_id
WHERE f.scheduled_departure BETWEEN NOW() AND NOW() + INTERVAL '7 days';
```

```
CREATE VIEW

Query returned successfully in 50 msec.
```

Total rows: Query complete 00:00:00.050

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

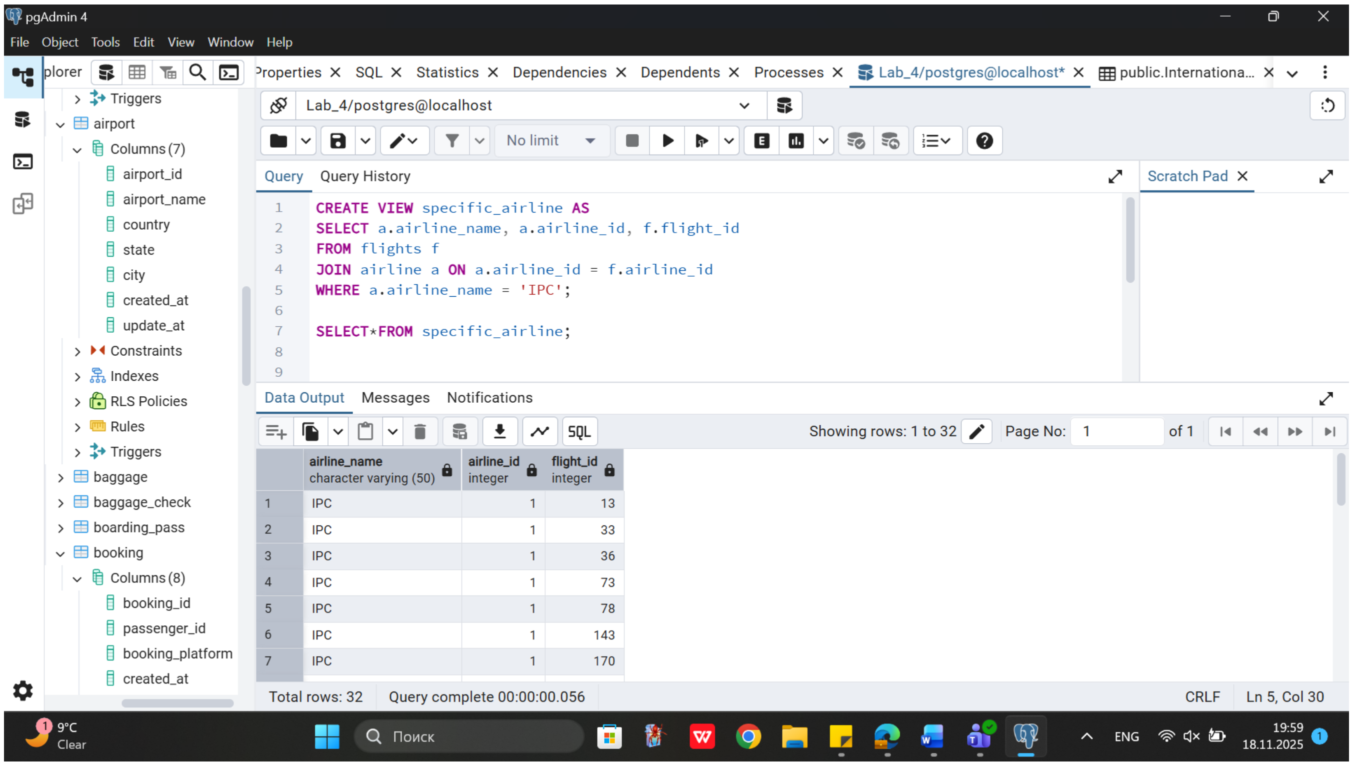


```sql
CREATE VIEW popular_routs AS
SELECT
    f.departure_airport_id,
    f.arrival_airport_id,
    count(b.booking_id) AS total
FROM flights f
JOIN booking_flight bo ON f.flight_id = bo.flight_id
JOIN booking b ON b.booking_id = bo.booking_id
GROUP BY f.departure_airport_id, f.arrival_airport_id
ORDER BY total DESC LIMIT 5;
```

|  | departure_airport_id integer | arrival_airport_id integer | total bigint |
|---|---|---|---|
| 1 | 10 | 7 | 18 |
| 2 | 4 | 10 | 15 |
| 3 | 13 | 4 | 14 |
| 4 | 6 | 16 | 14 |
| 5 | 14 | 7 | 11 |

Total rows: 5 Query complete 00:00:00.051

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



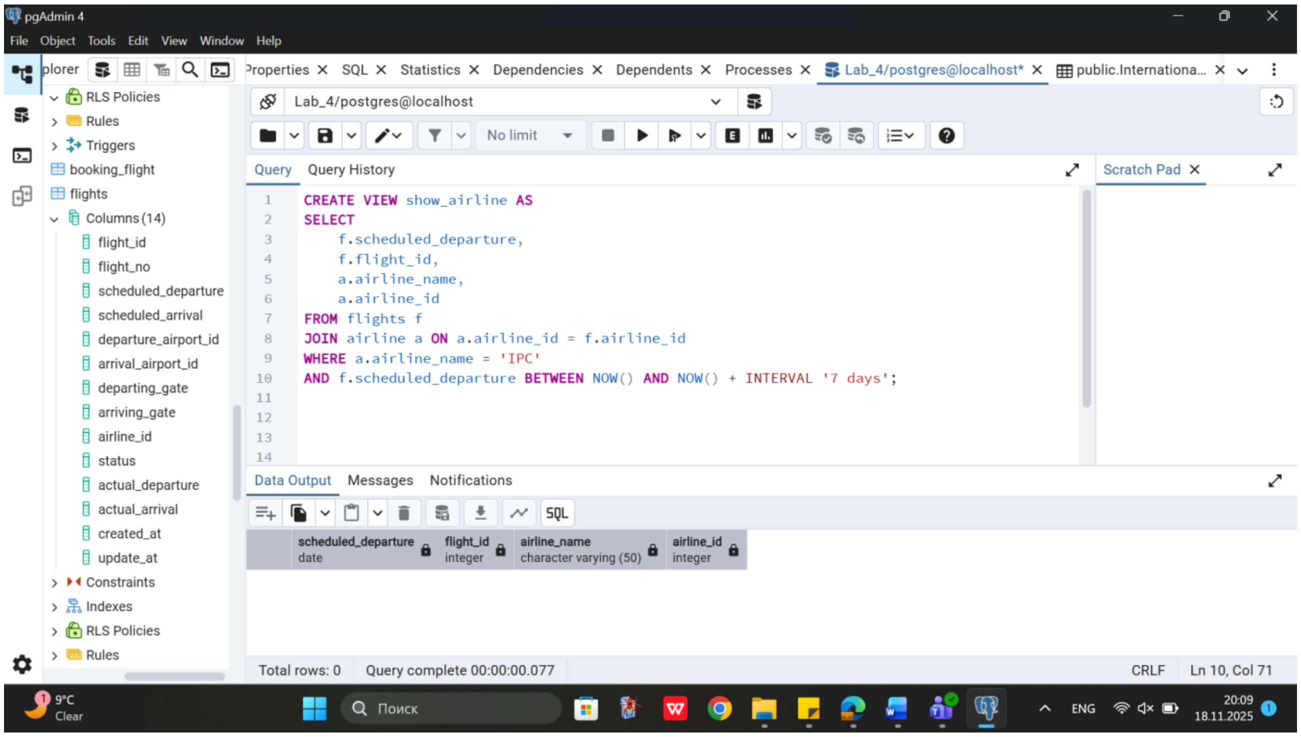
```sql
CREATE VIEW specific_airline AS
SELECT a.airline_name, a.airline_id, f.flight_id
FROM flights f
JOIN airline a ON a.airline_id = f.airline_id
WHERE a.airline_name = 'IPC';

SELECT*FROM specific_airline;
```

|  | airline_name character varying (50) | airline_id integer | flight_id integer |
|---|---|---|---|
| 1 | IPC | 1 | 13 |
| 2 | IPC | 1 | 33 |
| 3 | IPC | 1 | 36 |
| 4 | IPC | 1 | 73 |
| 5 | IPC | 1 | 78 |
| 6 | IPC | 1 | 143 |
| 7 | IPC | 1 | 170 |

Total rows: 32 Query complete 00:00:00.056

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

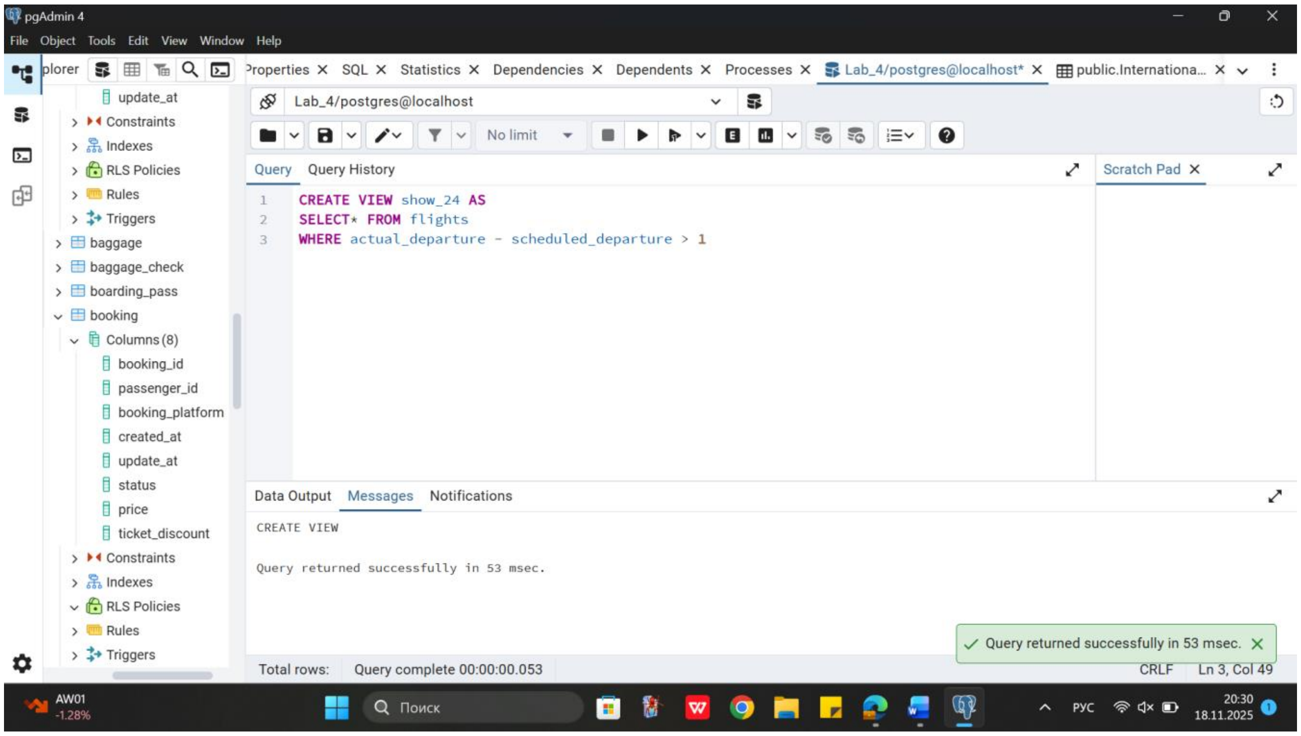


```sql
CREATE VIEW show_airline AS
SELECT
    f.scheduled_departure,
    f.flight_id,
    a.airline_name,
    a.airline_id
FROM flights f
JOIN airline a ON a.airline_id = f.airline_id
WHERE a.airline_name = 'IPC'
AND f.scheduled_departure BETWEEN NOW() AND NOW() + INTERVAL '7 days';
```

| scheduled_departure date | flight_id integer | airline_name character varying (50) | airline_id integer |
|---|---|---|---|

Total rows: 0   Query complete 00:00:00.077   CRLF   Ln 10, Col 71

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



```sql
CREATE VIEW show_24 AS
SELECT* FROM flights
WHERE actual_departure - scheduled_departure > 1
```

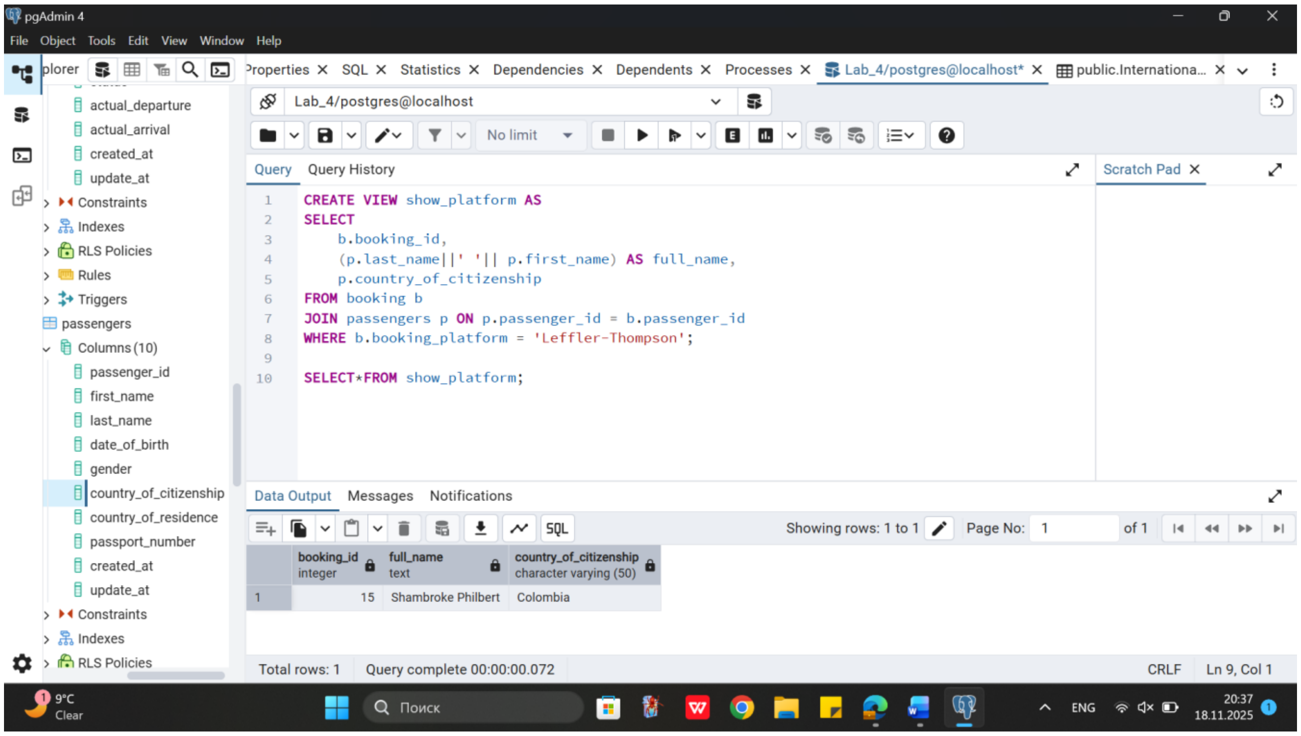
```
CREATE VIEW

Query returned successfully in 53 msec.
```

Query returned successfully in 53 msec.

Total rows:   Query complete 00:00:00.053   CRLF   Ln 3, Col 49

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.



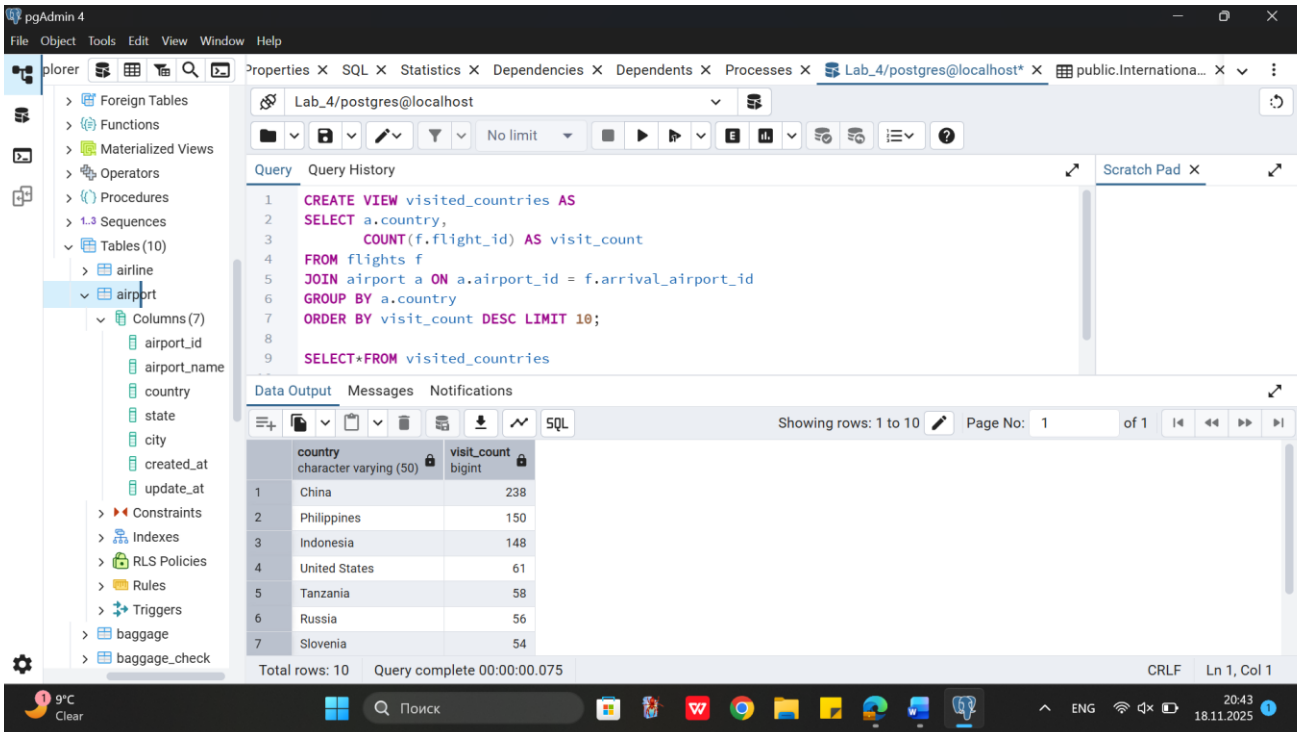
```
CREATE VIEW show_platform AS
SELECT
    b.booking_id,
    (p.last_name||' '|| p.first_name) AS full_name,
    p.country_of_citizenship
FROM booking b
JOIN passengers p ON p.passenger_id = b.passenger_id
WHERE b.booking_platform = 'Leffler-Thompson';

SELECT*FROM show_platform;
```

| | booking_id integer | full_name text | country_of_citizenship character varying (50) |
|---|---|---|---|
| 1 | 15 | Shambroke Philbert | Colombia |

Total rows: 1 Query complete 00:00:00.072

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



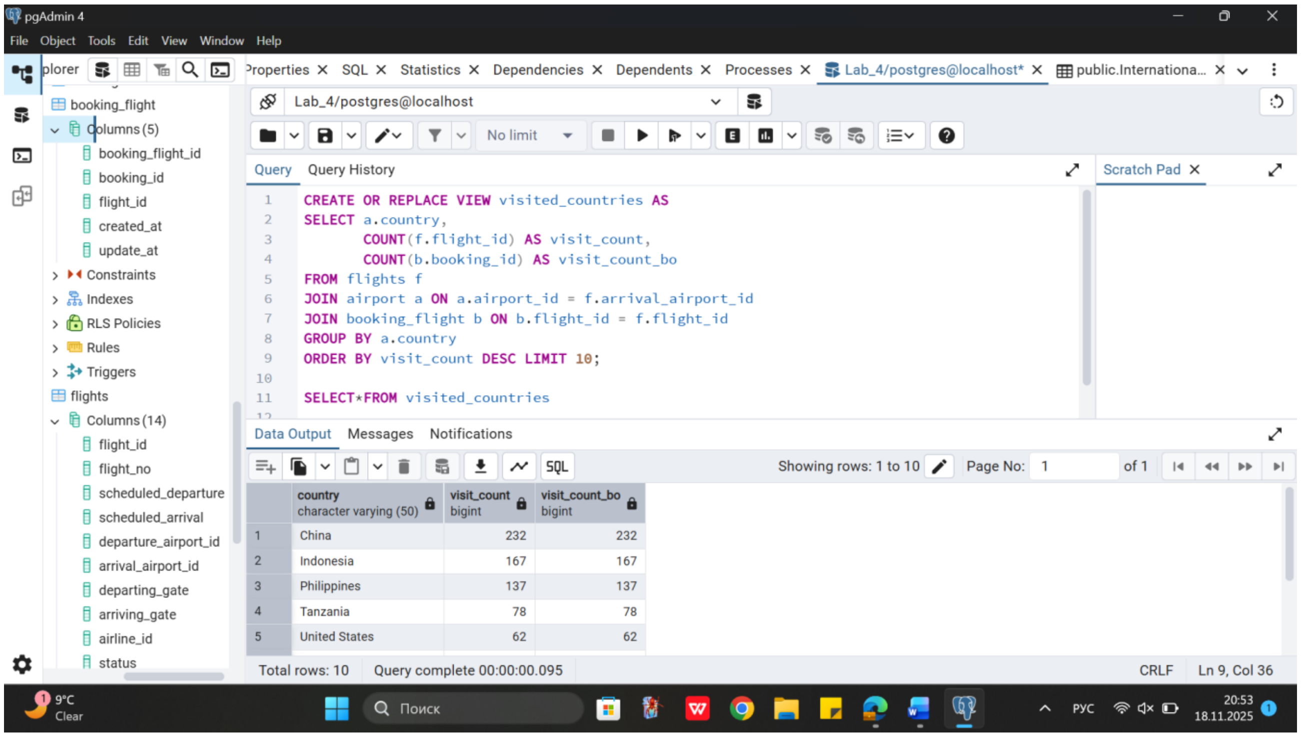
```
CREATE VIEW visited_countries AS
SELECT a.country,
       COUNT(f.flight_id) AS visit_count
FROM flights f
JOIN airport a ON a.airport_id = f.arrival_airport_id
GROUP BY a.country
ORDER BY visit_count DESC LIMIT 10;

SELECT*FROM visited_countries
```

| | country character varying (50) | visit_count bigint |
|---|---|---|
| 1 | China | 238 |
| 2 | Philippines | 150 |
| 3 | Indonesia | 148 |
| 4 | United States | 61 |
| 5 | Tanzania | 58 |
| 6 | Russia | 56 |
| 7 | Slovenia | 54 |

Total rows: 10 Query complete 00:00:00.075

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



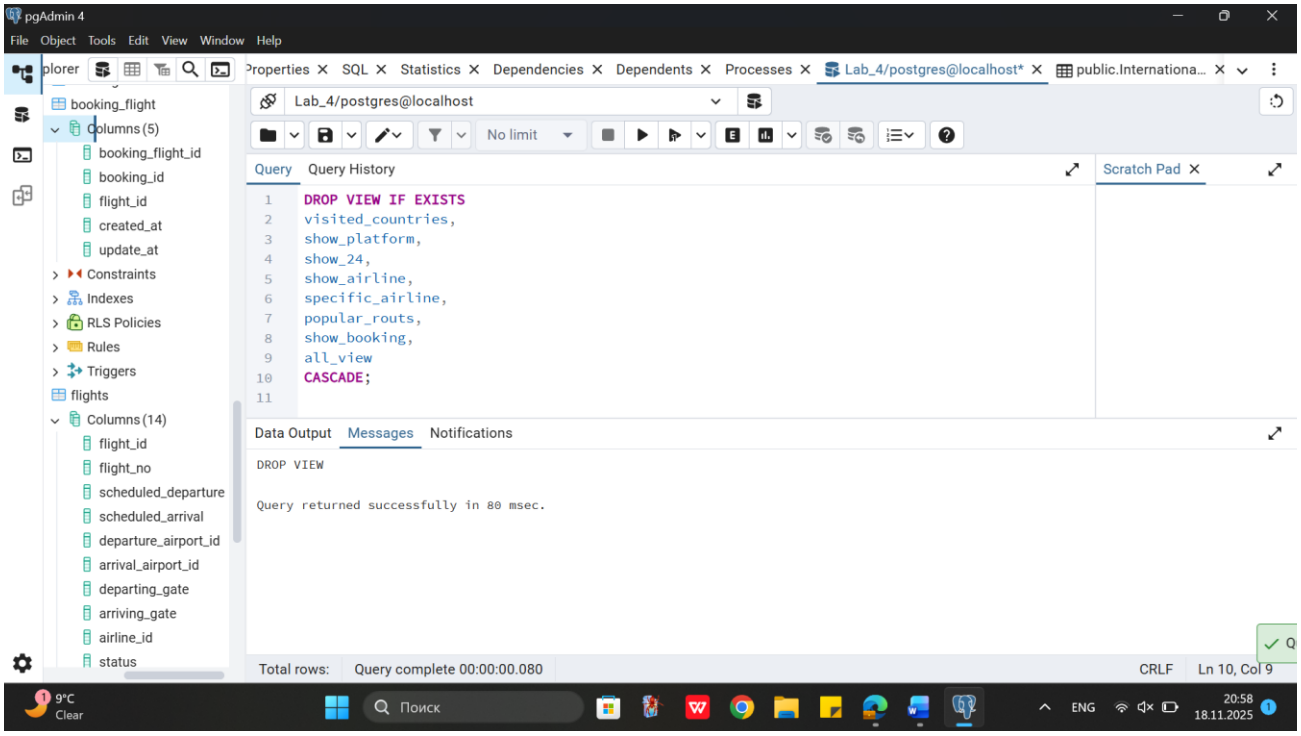
```sql
CREATE OR REPLACE VIEW visited_countries AS
SELECT a.country,
       COUNT(f.flight_id) AS visit_count,
       COUNT(b.booking_id) AS visit_count_bo
FROM flights f
JOIN airport a ON a.airport_id = f.arrival_airport_id
JOIN booking_flight b ON b.flight_id = f.flight_id
GROUP BY a.country
ORDER BY visit_count DESC LIMIT 10;

SELECT*FROM visited_countries
```

|  | country<br>character varying (50) | visit_count<br>bigint | visit_count_bo<br>bigint |
|---|---|---|---|
| 1 | China | 232 | 232 |
| 2 | Indonesia | 167 | 167 |
| 3 | Philippines | 137 | 137 |
| 4 | Tanzania | 78 | 78 |
| 5 | United States | 62 | 62 |

Total rows: 10 Query complete 00:00:00.095

10. Drop all existing views.



```sql
DROP VIEW IF EXISTS
visited_countries,
show_platform,
show_24,
show_airline,
specific_airline,
popular_routs,
show_booking,
all_view
CASCADE;
```

```
DROP VIEW

Query returned successfully in 80 msec.
```

Total rows: Query complete 00:00:00.080