LAB8 Abdykamat Adilet. VIEW

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

CREATE VIEW flights_on_date AS SELECT * FROM flights

WHERE DATE(sch_departure_time) = '2025-01-15';

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

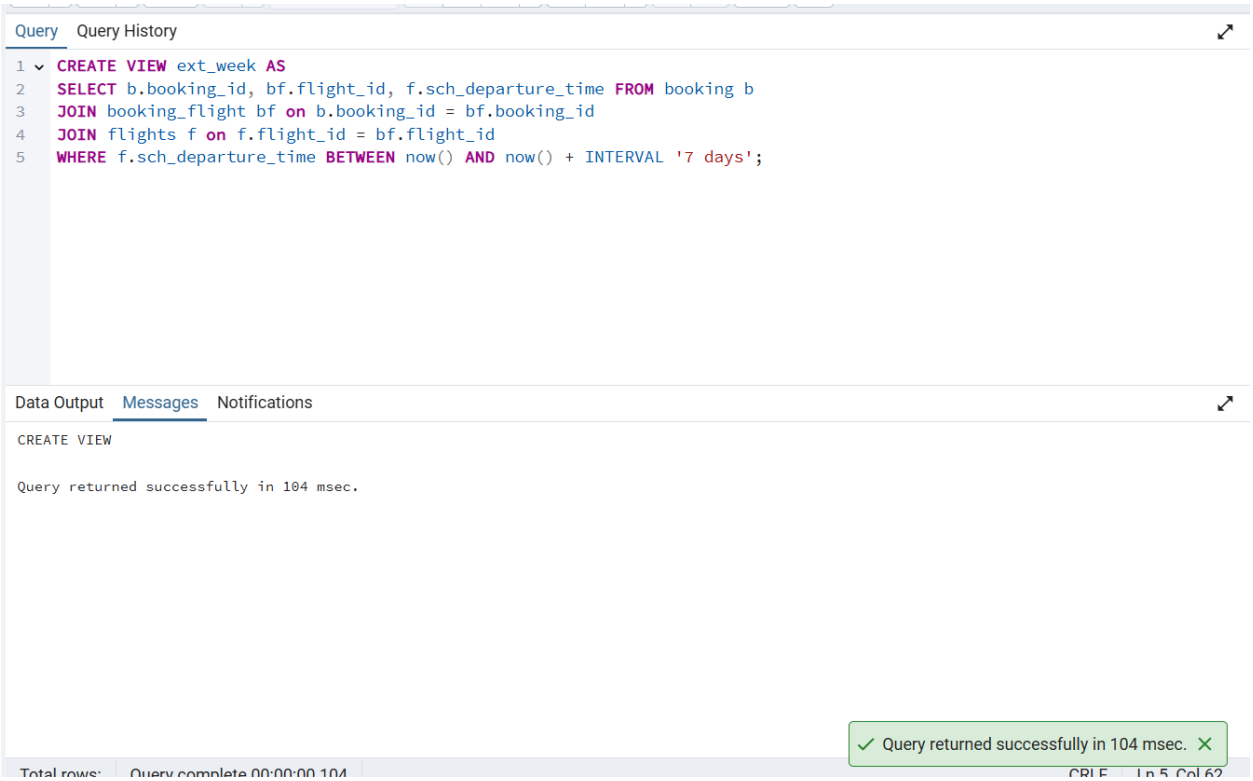
CREATE VIEW ext_week AS

SELECT b.booking_id, bf.flight_id, f.sch_departure_time FROM booking b

JOIN booking_flight bf on b.booking_id = bf.booking_id

JOIN flights f on f.flight_id = bf.flight_id

WHERE f.sch_departure_time BETWEEN now() AND now() + INTERVAL '7 days';



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

```
CREATE VIEW top5_routes AS
SELECT
   dep.airport_name AS from_airport,
   arr.airport_name AS to_airport,
   COUNT(*) AS total_bookings
FROM booking_flight bf
JOIN flights f ON bf.flight_id = f.flight_id
JOIN airport dep ON f.departing_airport_id = dep.airport_id
JOIN airport arr ON f.arriving_airport_id = arr.airport_id
GROUP BY dep.airport_name, arr.airport_name
ORDER BY total_bookings DESC
LIMIT 5;
```

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

CREATE VIEW flights_by_airline AS

SELECT f.flight_id, a.airline_name, f.sch_departure_time, f.sch_arrival_time

FROM flights f

JOIN airline a on f.airline_id = a.airline_id

WHERE a.airline_name = 'Air Astana';

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

```
CREATE OR REPLACE VIEW flights_by_airline AS

SELECT f.flight_id, a.airline_name,

    f.sch_departure_time, f.sch_arrival_time

FROM flights f

JOIN airline a ON f.airline_id = a.airline_id

WHERE a.airline_name = 'Air Astana' AND f.sch_departure_time

BETWEEN now() AND now() + INTERVAL '7 days';
```

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

```
CREATE VIEW delayed_24h AS

SELECT flight_id, sch_departure_time, act_departure_time,

    act_departure_time - sch_departure_time FROM flights

WHERE act_departure_time - sch_departure_time > INTERVAL '24 hours';
```

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 leffler_passengers AS

SELECT p.first_name || ' ' || p.last_name as full_name, p.country_of_citizenship FROM passengers p

JOIN tickets t on t.passenger_id = p.passenger_id

JOIN booking b on b.passenger_id = p.passenger_id

WHERE b.booking_platform = 'Leffler-Thompson';

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

CREATE VIEW top10_countries AS

SELECT arr.country, COUNT(*) AS visits FROM booking_flight bf

JOIN flights f ON bf.flight_id = f.flight_id

JOIN airport arr ON arr.airport_id = f.arriving_airport_id

GROUP BY arr.country

ORDER BY visits DESC

limit 10;

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

CREATE OR REPLACE VIEW flights_on_date AS

SELECT f.*, dep.city AS departure_city FROM flights f

JOIN airport dep on dep.airport_id = f.departing_airport_id

WHERE date(f.sch_departure_time) = '2025-01-15';

RESULT:

10. Drop all existing views.