

LAB 8. Nurlan Olzhas

```
CREATE VIEW Flights_On_Specific_Date AS
SELECT
    flight_no,
    scheduled_departure,
    scheduled_arrival,
    departure_airport_id,
    arrival_airport_id,
    departing_gate,
    arriving_gate,
    airline_id,
    status
FROM
    flights
WHERE
    scheduled_departure = '2023-05-13';
```

The screenshot shows the pgAdmin 4 interface. In the Object Explorer, under the 'airport_db' database, a new view named 'Flights_On_Specific_Date' is being created. The query editor contains the SQL code provided above. The status bar at the bottom right indicates 'Query returned successfully in 110 msec.'

1)

```
CREATE VIEW Bookings_Next_Week AS
SELECT
    b.booking_id,
    b.passenger_id,
    b.booking_platform,
    b.status AS booking_status,
    f.flight_no,
    f.scheduled_departure
FROM
    booking b
JOIN
    booking_flight bf ON b.booking_id = bf.booking_id
JOIN
    flights f ON bf.flight_id = f.flight_id
WHERE
    f.scheduled_departure BETWEEN DATE('2025-11-19') AND DATE('2025-11-25');
```

The screenshot shows the pgAdmin 4 interface. In the Object Explorer, under the 'airport_db' database, a new view named 'Bookings_Next_Week' is being created. The query editor contains the SQL code provided above. The status bar at the bottom right indicates 'Query returned successfully in 57 msec.'

2)

✓ Query returned successfully in 57 msec.

```
CREATE VIEW Bookings_Next_Week AS
SELECT
    b.booking_id,
    b.passenger_id,
    b.booking_platform,
    b.status AS booking_status,
    f.flight_no,
    f.scheduled_departure
FROM
    booking b
JOIN
    booking_flight bf ON b.booking_id = bf.booking_id
JOIN
    flights f ON bf.flight_id = f.flight_id
WHERE
    f.scheduled_departure BETWEEN DATE('2025-11-19') AND DATE('2025-11-25');
```

The screenshot shows the pgAdmin 4 interface. In the Object Explorer, under the 'airport_db' database, a new view named 'Bookings_Next_Week' is being created. The query editor contains the SQL code provided above. A green checkmark icon and the message 'Query returned successfully in 57 msec.' are displayed in the status bar at the bottom right.

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

Servers(1)

PostgreSQL 17

Databases(5)

AIRPORT

Airport

airport_db

Casts

Catalogs

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Extensions

Foreign Data Wrappers

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Schemas

Subscriptions

mydb

postres

Login/Group Roles

Tablespaces

Query Query History

WHERE f.scheduled_departure BETWEEN DATE('2025-11-19') AND DATE('2025-11-25');

CREATE VIEW Top_5_Routes AS

SELECT f.departure_airport_id, f.arrival_airport_id, COUNT(bf.booking_id) AS number_of_bookings

FROM flights f

JOIN booking_flight bf ON f.flight_id = bf.flight_id

GROUP BY f.departure_airport_id, f.arrival_airport_id

ORDER BY number_of_bookings DESC

LIMIT 5;

Data Output Messages Notifications

CREATE VIEW

Query returned successfully in 48 msec.

3)

Total rows: Query complete 00:00:00.040

8°C Clear

Помощь

17:08 18.11.2025

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

Servers(1)

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Databases(5)

AIRPORT

Airport

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Login/Group Roles

Tablespaces

Query Query History

f.departure_airport_id, f.arrival_airport_id

ORDER BY number_of_bookings DESC

LIMIT 5;

CREATE VIEW Flights_By_Airline AS

SELECT f.flight_no, f.scheduled_departure, f.scheduled_arrival, a.airline_name

FROM flights f

JOIN airline a ON f.airline_id = a.airline_id

WHERE a.airline_id = 1;

Data Output Messages Notifications

CREATE VIEW

Query returned successfully in 48 msec.

4)

5)

```

JOIN
    flights f
    airline a ON f.airline_id = a.airline_id
WHERE
    a.airline_id = 1;

CREATE OR REPLACE VIEW Flights_By_Airline AS
SELECT
    f.flight_no,
    f.scheduled_departure,
    f.scheduled_arrival,
    a.airline_name
FROM
    flights f
JOIN
    airline a ON f.airline_id = a.airline_id
WHERE
    a.airline_id = 1
    AND f.scheduled_departure BETWEEN DATE('2025-11-19') AND DATE('2025-11-25');

Data Output Messages Notifications
CREATE VIEW
Query returned successfully in 38 msec.

```

5)

```

Total rows: Query complete 00:00:00.036
7°C Clear 17:09 ENG Wi-Fi 18.11.2025
pgAdmin 4
File Object Tools Edit View Window Help
Servers > PostgreSQL 17 > Databases > airport_db
Object Explorer
PostgreSQL 17
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Data Output Messages Notifications
CREATE OR REPLACE VIEW Flights_Delayed_Over_24h AS
SELECT
    flight_no,
    scheduled_departure,
    actual_departure,
    status
FROM
    flights
WHERE
    status = 'Delayed'
    AND actual_departure >= (scheduled_departure + INTERVAL '1 day');

CREATE VIEW
Query returned successfully in 38 msec.

```

6)

```

Total rows: Query complete 00:00:00.038
Tempto drop Thursday 17:27 ENG Wi-Fi 18.11.2025
pgAdmin 4
File Object Tools Edit View Window Help
Servers > PostgreSQL 17 > Databases > airport_db
Object Explorer
PostgreSQL 17
Databases(5)
> AIRPORT
> Airport
> airport_db
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Data Output Messages Notifications
CREATE OR REPLACE VIEW Flights_Delayed_Over_24h AS
SELECT
    flight_no,
    scheduled_departure,
    actual_departure,
    status
FROM
    flights
WHERE
    status = 'Delayed'
    AND actual_departure >= (scheduled_departure + INTERVAL '1 day');

CREATE VIEW
Query returned successfully in 38 msec.

```

6)

```

CREATE VIEW Passengers_Leffler_Thompson AS
SELECT
    p.first_name,
    p.last_name,
    p.country_of_citizenship
FROM
    passengers p
JOIN
    booking b ON p.passenger_id = b.passenger_id
WHERE
    b.booking_platform = 'Leffler-Thompson';
SELECT * FROM Passengers_Leffler_Thompson;

```

	first_name	last_name	country_of_citizenship
1	Philbert	Shambroke	Colombia
2	Philbert	Shambroke	Colombia

7)

```

SELECT * FROM Passengers_Leffler_Thompson;

CREATE VIEW Top_10_Visited_Countries AS
SELECT
    a.country,
    COUNT(f.flight_id) AS total_arrivals
FROM
    airport a
JOIN
    flights f ON a.airport_id = f.arrival_airport_id
GROUP BY
    a.country
ORDER BY
    total_arrivals DESC
LIMIT 10;

```

8)

```


```

The screenshot shows the pgAdmin 4 interface with the following details:

- Servers:** PostgreSQL 17
- Databases:** AIRPORT, airport_db
- Current Database:** airport_db
- Query History:** Shows a query for flights arriving at specific airports.
- SQL Editor:** Contains the following code:

```
122    JOIN
123      flights f ON a.airport_id = f.arrival_airport_id
124    GROUP BY
125      a.country
126    ORDER BY
127      total_arrivals DESC
128    LIMIT 10;
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```

```
SELECT flight_no, scheduled_departure, status FROM flights WHERE scheduled_departure = '2023-05-13';
UPDATE flights
SET status = 'Cancelled'
WHERE flight_id = 27;
SELECT flight_no, scheduled_departure, status
FROM Flights_On_Specific_Date
WHERE scheduled_departure = '2023-05-13';
```
- Data Output:** Displays the results of the query, showing five rows of flight information.

flight_no	scheduled_departure	status
BR-RS	2023-05-13	Boarding
US-OK	2023-05-13	Boarding
US-KS	2023-05-13	Delayed
AU-TAS	2023-05-13	Boarding
UZ-SU	2023-05-13	Cancelled

9)

10)

Servers > PostgreSQL 17 > Databases > airport_db Total rows: 1 Query complete 00:00:00.036 CRLF Ln 162, Col 46