

Laboratory work 8

1.

The screenshot shows the pgAdmin 4 interface with the Object Explorer on the left and a query editor on the right. The Object Explorer displays a database structure with tables like 'airport', 'baggage', 'boarding_pass', 'booking', 'booking_flight', 'flights', and 'passengers'. The 'flights' table is selected, and its 'Columns (14)' are listed. The query editor contains the following SQL code:

```
CREATE VIEW departing_flight_today AS
SELECT
    flight_id,
    scheduled_departure,
    scheduled_arrival,
    departing_gate,
    arriving_gate,
    status,
    actual_departure,
    actual_arrival
FROM
    flights
WHERE
    DATE(scheduled_departure) = CURRENT_DATE;
```

The message area at the bottom indicates that the query was executed successfully in 291 msec.

2.

The screenshot shows the pgAdmin 4 interface with the Object Explorer on the left and a query editor on the right. The Object Explorer displays a database structure with tables like 'booking', 'flights', and 'passenger'. The 'flights' table is selected, and its 'Columns (14)' are listed. The query editor contains the following SQL code:

```
CREATE VIEW next_week_flights AS
SELECT
    b.booking_id,
    b.passenger_id,
    f.flight_id,
    f.scheduled_departure,
    f.scheduled_arrival
FROM
    booking b
LEFT JOIN booking_flight bf ON b.booking_id = bf.booking_id
LEFT JOIN flights f ON bf.flight_id = f.flight_id
WHERE DATE(f.scheduled_departure) BETWEEN CURRENT_DATE AND CURRENT_DATE + INTERVAL '1 week';
```

The message area at the bottom indicates that the query was executed successfully in 65 msec.

3.

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

- > 1.3 Sequences
- > Tables(10)
 - > airline
 - > airport
 - > Columns(7)
 - airport_id
 - airport_name
 - country
 - state
 - city
 - created_at
 - update_at
 - > Constraints
 - > Indexes
 - > RLS Policies
 - > Rules
 - > Triggers
 - > baggage
 - > baggage_check
 - > boarding_pass
 - > booking
 - > booking_flight
 - > flights
 - > Columns(14)
 - flight_id
 - flight_no
 - scheduled_departure
 - scheduled_arrival
 - departure_airport_id
 - arrival_airport_id
 - departing_gate
 - arriving_gate

Query Query History

```

1 CREATE VIEW five_most_popular_routes AS
2 SELECT
3     a.airport_name,
4     COUNT(a.airport_id)
5 FROM flights f
6 LEFT JOIN airport a ON a.airport_id = f.departure_airport_id
7 GROUP BY a.airport_id
8 ORDER BY COUNT(a.airport_id) DESC
9 LIMIT 5;

```

Data Output Messages Notifications

CREATE VIEW

Query returned successfully in 83 msec.

Total rows: Query complete 00:00:00.083 CRLF Ln 6, Col 40

4.

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

- > FTS Templates
- > Foreign Tables
- > Functions
- > Materialized Views
- > Operators
- > Procedures
- > 1.3 Sequences
- > Tables(10)
 - > airline
 - > Columns(6)
 - airline_id
 - airline_code
 - airline_name
 - airline_country
 - created_at
 - update_at
 - > Constraints
 - > Indexes
 - > RLS Policies
 - > Rules
 - > Triggers
 - > airport
 - > baggage
 - > baggage_check
 - > boarding_pass
 - > booking
 - > booking_flight
 - > flights
 - > Columns(14)
 - flight_id
 - flight_no
 - scheduled_departure
 - scheduled_arrival

Query Query History

```

1 CREATE VIEW ipc_airline_flights AS
2 SELECT
3     flight_id
4     FROM flights f
5     LEFT JOIN airline a ON a.airline_id = f.airline_id
6     WHERE a.airline_name = 'IPC';
7

```

Data Output Messages Notifications

CREATE VIEW

Query returned successfully in 72 msec.

Total rows: Query complete 00:00:00.072 CRLF Ln 6, Col 30

✓ Query returned successfully in 72 msec. ✘

5.

6.

```

CREATE OR REPLACE VIEW ipc_airline_flights AS
SELECT
    flight_id
FROM
    flights f
LEFT JOIN
    airline a ON a.airline_id = f.airline_id
WHERE
    a.airline_name = 'IPC'
    AND DATE(f.scheduled_departure) BETWEEN CURRENT_DATE AND CURRENT_DATE + INTERVAL '1 week';

```

Total rows: 0 Query complete 00:00:00.070 CRLF Ln 1, Col 18

7.

```

CREATE VIEW delayed_flights AS
SELECT
    flight_id,
    scheduled_departure,
    actual_departure
FROM
    flights
WHERE
    DATE(actual_departure) - DATE(scheduled_departure) > 1;

```

ERROR: ошибка синтаксиса (примерное положение: "day")
LINE 7: ... DATE(actual_departure) - DATE(scheduled_departure) > 1 day;
A
ОШИБКА: ошибка синтаксиса (примерное положение: "day")
SQL state: 42601
Character: 166

Total rows: 0 Query complete 00:00:00.076 CRLF Ln 7, Col 62

8.

The screenshot shows the pgAdmin 4 interface with the Object Explorer on the left and a query editor on the right. The Object Explorer displays the schema structure, including an `airline` table with 6 columns and an `airport` table with 7 columns. The query editor contains the following SQL code:

```
CREATE VIEW passengers_to_leffler_thompson AS
SELECT
    CONCAT(p.first_name, ' ', p.last_name) AS full_name,
    country_of_citizenship
FROM passengers p
LEFT JOIN booking b ON b.passenger_id = p.passenger_id
LEFT JOIN booking.flight bf ON bf.booking_id = b.booking_id
LEFT JOIN flights f ON f.flight_id = bf.flight_id
LEFT JOIN airport a ON a.airport_id = f.arrival_airport_id
WHERE
    a.airport_name = 'Leffler-Thompson';
```

The message area below the query editor shows "Query returned successfully in 97 msec." and "Total rows: Query complete 00:00:00.097".

9.

The screenshot shows the pgAdmin 4 interface with the Object Explorer on the left and a query editor on the right. The Object Explorer displays the schema structure, including an `airline` table with 6 columns and an `airport` table with 7 columns. The query editor contains the following SQL code:

```
CREATE VIEW most_visited_countries AS
SELECT
    country,
    COUNT(country)
FROM airport
GROUP BY country
ORDER BY COUNT(country) DESC
LIMIT 10;
```

The message area below the query editor shows "Query returned successfully in 85 msec." and "Total rows: Query complete 00:00:00.085".

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

lab2/postgres@PostgreSQL 17*

```

CREATE OR REPLACE VIEW passengers_to_leffler_thompson AS
SELECT
    CONCAT(p.first_name, ' ', p.last_name) AS full_name,
    country_of_citizenship
FROM passengers p
LEFT JOIN booking b ON b.passenger_id = p.passenger_id
LEFT JOIN booking_flight bf ON bf.booking_id = b.booking_id
LEFT JOIN flights f ON f.flight_id = bf.flight_id
LEFT JOIN airport a ON a.airport_id = f.arrival_airport_id
WHERE
    a.airport_name = 'Leffler-Thompson'
    AND DATE(f.scheduled_departure) < CURRENT_DATE + INTERVAL '1 week';

```

Data Output Messages Notifications

CREATE VIEW

Query returned successfully in 70 msec.

Total rows: Query complete 00:00:00.070 CRLF Ln 12, Col 69

10.

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

lab2/postgres@PostgreSQL 17*

```

DROP VIEW delayed_flights;
DROP VIEW departing_flight_today;
DROP VIEW five_most_popular_routes;
DROP VIEW ipc_airline_flights;
DROP VIEW most_visited_countries;
DROP VIEW next_week_flights;
DROP VIEW passengers_to_leffler_thompson;

```

Data Output Messages Notifications

DROP VIEW

Query returned successfully in 81 msec.

Total rows: Query complete 00:00:00.081 CRLF Ln 7, Col 42