pgAdmin 4

Object Explorer

> Rules
> Triggers
∨ booking_flight
  ∨ Columns (5)
    booking_flight_id
    booking_id
    flight_id
    created_at
    updated_at
  > Constraints
  > Indexes
  > RLS Policies
  > Rules
  > Triggers
∨ flights
  ∨ Columns (12)
    flight_id
    sch_departure_time
    sch_arrival_time
    departing_airport_id
    arriving_airport_id
    departing_gate
    arriving_gate
    airline_id
    act_departure_time
    act_arrival_time
    created_at
    updated_at
  > Constraints
  > Indexes

BD_Lab2/postgres@PostgreSQL 17* ×

BD_Lab2/postgres@PostgreSQL 17

No limit

Query    Query History

```sql
1 ∨ #1
2   CREATE VIEW flights_by_date AS
3   SELECT *
4   FROM flights
5   WHERE DATE(act_departure_time) = '2025-11-23';
6
7 ∨ #2
8   CREATE VIEW bookings_next_week AS
9   SELECT b.*
10  FROM bookings b
11  JOIN flights f ON b.flight_id = f.flight_id
12  WHERE f.departure_time BETWEEN NOW() AND NOW() + INTERVAL 7 DAY;
13
14 ∨ #3
15  CREATE VIEW top_5_routes AS
16  SELECT
17      f.departure_city,
18      f.arrival_city,
19      COUNT(b.booking_id) as booking_count
20  FROM flights f
21  JOIN bookings b ON f.flight_id = b.flight_id
```

Data Output    Messages    Notifications

CREATE VIEW

Query returned successfully in 70 msec.

Total rows:    Query complete 00:00:00.070                    LF    Ln 2, Col 1

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BD_Lab2/postgres@PostgreSQL 17

No limit

Query    Query History

```
1 v  #1
2    CREATE VIEW flights_by_date AS
3    SELECT *
4    FROM flights
5    WHERE DATE(act_departure_time) = '2025-11-23';
6
7 v  #2
8    CREATE VIEW bookings_next_week AS
9    SELECT b.*
10   FROM booking b
11   JOIN flights f ON b.flight_id = f.flight_id
12   WHERE f.act_departure_time BETWEEN NOW() AND NOW() + INTERVAL '7 DAY';
13
14 v #3
15   CREATE VIEW top_5_routes AS
16   SELECT
17       f.departure_city,
18       f.arrival_city,
19       COUNT(b.booking_id) as booking_count
20   FROM flights f
21   JOIN bookings b ON f.flight_id = b.flight_id
22   GROUP BY f.departure_city, f.arrival_city
23   ORDER BY booking_count DESC
24   LIMIT 5;
25
```

Data Output    Messages    Notifications

```
CREATE VIEW

Query returned successfully in 101 msec.
```

Total rows:    Query complete 00:00:00.101                                    LF    Ln 8, Col 1

Object Explorer tree:
- Rules
- Triggers
- booking_flight
  - Columns (5)
    - booking_fligh
    - booking_id
    - flight_id
    - created_at
    - updated_at
  - Constraints
  - Indexes
  - RLS Policies
  - Rules
  - Triggers
- flights
  - Columns (12)
    - flight_id
    - sch_departur
    - sch_arrival_ti
    - departing_air
    - arriving_airpo
    - departing_ga
    - arriving_gate
    - airline_id
    - act_departur
    - act_arrival_ti
    - created_at
    - updated_at
  - Constraints
  - Indexes
  - RLS Policies
  - Rules
  - Triggers
- passengers
  - Columns (10)

> Rules
> Triggers
✓ booking_flight
  ✓ Columns (5)
    booking_flight_id
    booking_id
    flight_id
    created_at
    updated_at
  > Constraints
  > Indexes
  > RLS Policies
  > Rules
  > Triggers
✓ flights
  ✓ Columns (12)
    flight_id
    sch_departure_time
    sch_arrival_time
    departing_airport_id
    arriving_airport_id
    departing_gate
    arriving_gate
    airline_id
    act_departure_time
    act_arrival_time
    created_at
    updated_at
  > Constraints
  > Indexes
  > RLS Policies
  > Rules
  > Triggers
✓ passengers
  ✓ Columns (10)

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BD_Lab2/postgres@PostgreSQL 17

No limit

Query    Query History

```
10   FROM booking b
11   JOIN flights f ON b.flight_id = f.flight_id
12   WHERE f.act_departure_time BETWEEN NOW() AND NOW() + INTERVAL '7 DAY';
13
14 ⌄ #3
15   CREATE VIEW top_5_routes AS
16   SELECT
17       f.departing_airport_id,
18       f.arriving_airport_id,
19       COUNT(b.booking_id) as booking_count
20   FROM flights f
21   JOIN booking b ON f.flight_id = b.flight_id
22   GROUP BY f.departing_airport_id, f.arriving_airport_id
23   ORDER BY booking_count DESC
24   LIMIT 5;
25
26 ⌄ #4.
27   CREATE VIEW airline_flights AS
28   SELECT *
29   FROM flights
30   WHERE airline = 'Leffler-Thompson';
31
32 ⌄ #5
33   CREATE OR REPLACE VIEW airline_flights AS
34   SELECT *
```

Data Output    Messages    Notifications

```
CREATE VIEW

Query returned successfully in 68 msec.
```

Total rows:    Query complete 00:00:00.068                                    LF    Ln 15, Col 1

```
14 ∨  #3
15    CREATE VIEW top_5_routes AS
16    SELECT
17        f.departing_airport_id,
18        f.arriving_airport_id,
19        COUNT(b.booking_id) as booking_count
20    FROM flights f
21    JOIN booking b ON f.flight_id = b.flight_id
22    GROUP BY f.departing_airport_id, f.arriving_airport_id
23    ORDER BY booking_count DESC
24    LIMIT 5;
25
26 ∨  #4.
27    CREATE VIEW airline_flights AS
28    SELECT *
29    FROM airline
30    WHERE airline_name = 'Leffler-Thompson';
31
32 ∨  #5
33    CREATE OR REPLACE VIEW airline_flights AS
34    SELECT *
35    FROM flights
36    WHERE airline = 'Leffler-Thompson'
37    AND departure_time BETWEEN NOW() AND NOW() + INTERVAL 7 DAY;
38
```

Data Output   Messages   Notifications

```
CREATE VIEW

Query returned successfully in 80 msec.
```

✓ Query returned successfully in 80 msec. ✕

Total rows:   Query complete 00:00:00.080                    LF    Ln 27, Col 1

Object Explorer sidebar:
- Functions
- Materialized Views
- Operators
- Procedures
- 1..3 Sequences
- Tables (10)
  - airline
    - Columns (6)
      - airline_id
      - airline_code
      - airline_name
      - airline_country
      - created_at
      - updated_at
    - Constraints
    - Indexes
    - RLS Policies
    - Rules
    - Triggers
  - airport
    - Columns (7)
      - airport_id
      - airport_name
      - country
      - state
      - city
      - created_at
      - updated_at
    - Constraints
    - Indexes
    - RLS Policies
    - Rules
    - Triggers
  - baggage
  - baggage_check

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BD_Lab2/postgres@PostgreSQL 17

Query   Query History

```
21    JOIN booking b ON f.flight_id = b.flight_id
22    GROUP BY f.departing_airport_id, f.arriving_airport_id
23    ORDER BY booking_count DESC
24    LIMIT 5;
25
26  ⌄ #4.
27    CREATE VIEW airline_flights AS
28    SELECT *
29    FROM airline
30    WHERE airline_name = 'Leffler-Thompson';
31
32  ⌄ #5
33    CREATE OR REPLACE VIEW airline_flights AS
34    SELECT f.*
35    FROM flights f
36    JOIN airline a ON f.airline_id = a.airline_id
37    WHERE a.airline_name = 'Leffler-Thompson'
38      AND f.act_departure_time BETWEEN NOW() AND NOW() + INTERVAL '7 days';
39
40
41
42
43  ⌄ #6
44    CREATE VIEW delayed_flights AS
45    SELECT *
```

Data Output   Messages   Notifications

```
CREATE VIEW

Query returned successfully in 46 msec.
```

Total rows:   Query complete 00:00:00.046                                                   LF   Ln 33, Col 1

```
34  SELECT f.*
35  FROM flights f
36  JOIN airline a ON f.airline_id = a.airline_id
37  WHERE a.airline_name = 'Leffler-Thompson'
38    AND f.act_departure_time BETWEEN NOW() AND NOW() + INTERVAL '7 days';
39
40
41
42
43  #6
44  CREATE OR REPLACE VIEW delayed_flights AS
45  SELECT *
46  FROM flights
47  WHERE act_departure_time > sch_departure_time + INTERVAL '24 hours';
48
49
50  #7
51  CREATE VIEW leffler_thompson_passengers AS
52  SELECT
53      p.first_name,
54      p.last_name,
55      p.country
56  FROM passengers p
57  JOIN bookings b ON p.passenger_id = b.passenger_id
58  JOIN flights f ON b.flight_id = f.flight_id
59  WHERE f.airline = 'Leffler-Thompson';
```

Data Output   Messages   Notifications

```
CREATE VIEW

Query returned successfully in 84 msec.
```

Query returned successfully in 84 msec.

Total rows:   Query complete 00:00:00.084

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BD_Lab2/postgres@PostgreSQL 17

Query    Query History

```
41
42
43   #6
44   CREATE OR REPLACE VIEW delayed_flights AS
45   SELECT *
46   FROM flights
47   WHERE act_departure_time > sch_departure_time + INTERVAL '24 hours';
48
49
50   #7
51   CREATE OR REPLACE VIEW leffler_thompson_passengers AS
52   SELECT
53       p.first_name,
54       p.last_name,
55       p.country_of_citizenship
56   FROM passengers p
57   JOIN booking b ON p.passenger_id = b.passenger_id
58   JOIN flights f ON b.flight_id = f.flight_id
59   JOIN airline a ON f.airline_id = a.airline_id
60   WHERE a.airline_name = 'Leffler-Thompson';
61
62
63
64   SELECT * FROM leffler_thompson_passengers;
65
```

Data Output    Messages    Notifications

CREATE VIEW

Query returned successfully in 57 msec.

✓ Query returned successfully in 57 msec.  ✕

Total rows:    Query complete 00:00:00.057                           LF    Ln 51, Col 1

```
57   JOIN booking b ON p.passenger_id = b.passenger_id
58   JOIN flights f ON b.flight_id = f.flight_id
59   JOIN airline a ON f.airline_id = a.airline_id
60   WHERE a.airline_name = 'Leffler-Thompson';
61
62
63
64   SELECT * FROM leffler_thompson_passengers;
65
66 ∨ #8.
67   CREATE VIEW top_10_countries AS
68   SELECT
69       p.country_of_citizenship,
70       COUNT(b.booking_id) as visit_count
71   FROM passengers p
72   JOIN booking b ON p.passenger_id = b.passenger_id
73   GROUP BY p.country_of_citizenship
74   ORDER BY visit_count DESC
75   LIMIT 10;
76
77 ∨ #9
78   CREATE OR REPLACE VIEW top_5_routes AS
79   SELECT
80       f.departure_city,
81       f.arrival_city,
```

Data Output    Messages    Notifications

CREATE VIEW

Query returned successfully in 88 msec.

```sql
73    GROUP BY p.country_of_citizenship
74    ORDER BY visit_count DESC
75    LIMIT 10;
76
77 ∨  #9
78    CREATE OR REPLACE VIEW top_5_routes AS
79    SELECT
80        da.city AS departure_city,
81        aa.city AS arrival_city,
82        al.airline_name AS airline,
83        COUNT(b.booking_id) AS booking_count,
84        AVG(b.price) AS avg_booking_amount
85    FROM flights f
86    JOIN booking b ON f.flight_id = b.flight_id
87    JOIN airport da ON f.departing_airport_id = da.airport_id
88    JOIN airport aa ON f.arriving_airport_id = aa.airport_id
89    JOIN airline al ON f.airline_id = al.airline_id
90    GROUP BY da.city, aa.city, al.airline_name
91    ORDER BY booking_count DESC
92    LIMIT 5;
93
94
95
96
97    SELECT * FROM top_5_routes;
```

Data Output    Messages    Notifications

```
CREATE VIEW

Query returned successfully in 77 msec.
```

✓ Query returned successfully in 77 msec. ✕

```
82        al.airline_name AS airline,
83        COUNT(b.booking_id) AS booking_count,
84        AVG(b.price) AS avg_booking_amount
85   FROM flights f
86   JOIN booking b ON f.flight_id = b.flight_id
87   JOIN airport da ON f.departing_airport_id = da.airport_id
88   JOIN airport aa ON f.arriving_airport_id = aa.airport_id
89   JOIN airline al ON f.airline_id = al.airline_id
90   GROUP BY da.city, aa.city, al.airline_name
91   ORDER BY booking_count DESC
92   LIMIT 5;
93
94
95
96
97   SELECT * FROM top_5_routes;
98
99 v #10
100      DROP VIEW IF EXISTS flights_by_date;
101      DROP VIEW IF EXISTS bookings_next_week;
102      DROP VIEW IF EXISTS top_5_routes;
103      DROP VIEW IF EXISTS airline_flights;
104      DROP VIEW IF EXISTS delayed_flights;
105      DROP VIEW IF EXISTS leffler_thompson_passengers;
106      DROP VIEW IF EXISTS top_10_countries;
```

Data Output  Messages  Notifications

```
DROP VIEW

Query returned successfully in 65 msec.
```

✓ Query returned successfully in 65 msec. ✕

Total rows:    Query complete 00:00:00.065                                LF    Ln 100, Col 1