

Object Explorer Constraints Indexes RLS Policies Rules Triggers baggage baggage_check boarding_pass booking booking_flight Columns Constraints Indexes RLS Policies Rules Triggers flights Columns (12)

Query Query History Scratch Pad

```
-- task 1
CREATE VIEW flights_by_date AS
SELECT *
FROM flights
WHERE DATE(sch_departure_time) = '2025-01-18';
SELECT * FROM flights_by_date;
```

Data Output Messages Notifications

	flight_id	sch_departure_time	sch_arrival_time	departing_airport_id	arriving_airport_id	flight_number	arriving_gate	airline_id	act_departure_time
1	42	2025-01-18 00:00:00	2022-11-12 00:00:00	464	384	MRM	VVI	10	2025-05-03 00:00:00

Servers > PostgreSQL 17 > Databases > airport_db > Schemas > public > Tables > flights .272 CRLF Ln 7, Col 28

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File Object Tools Edit View Window Help

Object Explorer .passengers... X airport_db/postgre... X airport_db/postgre... X airport_db/postgre... X airport_db/postgres@PostgreSQL 17* X public.flights/airp... X

Constraints Indexes RLS Policies Rules Triggers baggage baggage_check boarding_pass booking booking_flight Columns Constraints Indexes RLS Policies Rules Triggers flights Columns(12) flight_id sch_departure_time sch_arrival_time departing_airport_id arriving_airport_id flight_number arriving_gate airline_id act_departure_time act_arrival_time created_at updated_at

airport_db/postgres@PostgreSQL 17

No limit

Query History Scratch Pad

```
-- task 1
CREATE VIEW flights_by_date AS
SELECT *
FROM flights
WHERE DATE(sch_departure_time) = '2025-01-18';

SELECT * FROM flights_by_date;

-- task 2
CREATE VIEW bookings_next_week AS
SELECT b.*, f.sch_departure_time, f.sch_arrival_time
FROM booking b
JOIN flights f ON b.flight_id = f.flight_id
WHERE f.sch_departure_time BETWEEN NOW() AND NOW() + INTERVAL '7 days';
```

Data Output Messages Notifications

CREATE VIEW

Query returned successfully in 1 secs 501 msec.

✓ Query returned successfully in 1 secs 501 msec. X

Total rows: Query complete 00:00:01.501 CRLF Ln 12, Col 14



Object Explorer



.passengers... X airport_db/postgre... X airport_db/postgre... X airport_db/postgre... X airport_db/postgres@PostgreSQL 17* X public.flights/airp... X



- > RLS Policies
- > Rules
- > Triggers

- > baggage
- > baggage_check
- > boarding_pass
- > booking

- > booking_flight
 - > Columns
 - > Constraints
 - > Indexes
 - > RLS Policies
 - > Rules
 - > Triggers

- > flights
 - > Columns(12)
 - flight_id
 - sch_departure_time
 - sch_arrival_time
 - departing_airport_id
 - arriving_airport_id
 - flight_number
 - arriving_gate
 - airline_id
 - act_departure_time
 - act_arrival_time
 - created_at
 - updated_at
 - > Constraints
 - > Indexes

```
-- task 3
CREATE OR REPLACE VIEW top_flight_routes AS
SELECT
    dep.airport_name AS departure_airport,
    arr.airport_name AS arrival_airport,
    COUNT(b.booking_id) AS booking_count
FROM flights f
JOIN booking b ON f.flight_id = b.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 booking_count DESC
LIMIT 5;

SELECT * FROM top_flight_routes;
```

Data Output Messages Notifications

	departure_airport character varying (50)	arrival_airport character varying (50)	booking_count bigint
1	Lamen Bay Airport	Currillo Airport	6
2	Sabu-Tardanu Airport	El Petén Airport	4
3	Lintsang Airfield	Petit Jean Park Airport	4
4	Inca Manco Capac International Airport	Wakunai Airport	4
5	Nyala Airport	Komatsu Airport	3

Showing rows: 1 to 5



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Total rows: 5

Query complete 00:00:06.112

CRLF Ln 30, Col 18

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File Object Tools Edit View Window Help

Object Explorer t_db/postgre... X airport_db/postgre... X airport_db/postgre... X airport_db/postgres@PostgreSQL 17* X public.flights/airp... X public.airline/airpo... X :

Query Scratch Pad

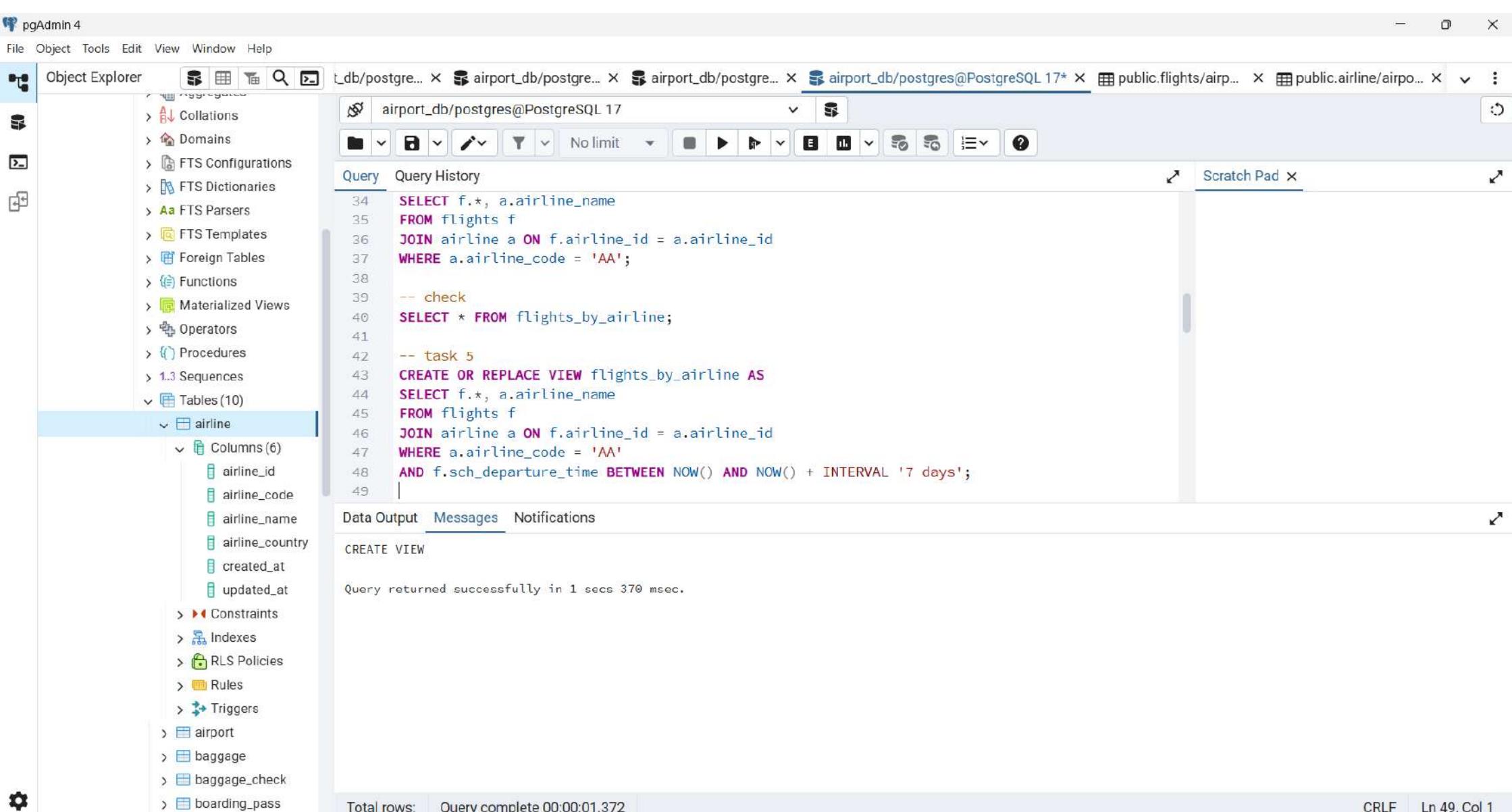
```
26 GROUP BY dep.airport_name, arr.airport_name
27 ORDER BY booking_count DESC
28 LIMIT 5;
29
30 SELECT * FROM top_flight_routes;
31
32 -- task 4
33 CREATE OR REPLACE VIEW flights_by_airline AS
34 SELECT f.*, a.airline_name
35 FROM flights f
36 JOIN airline a ON f.airline_id = a.airline_id
37 WHERE a.airline_code = 'AA';
38
39 -- check
40 SELECT * FROM flights_by_airline;
41
```

Data Output Messages Notifications

Showing rows: 1 to 9 Page No: 1 of 1 < << << >> >> >

	flight_id integer	sch_departure_time timestamp without time zone	sch_arrival_time timestamp without time zone	departing_airport_id integer	arriving_airport_id integer	flight_number text	arriving_gate character varying (50)	airline_id integer	act_departur timestamp v
1	27	2024-04-16 00:00:00	2025-07-12 00:00:00	470	433	LMP	GPT	39	2022-10-10
2	63	2021-01-03 00:00:00	2024-08-09 00:00:00	441	347	LFW	REB	105	2025-03-06
3	65	2022-09-17 00:00:00	2023-11-07 00:00:00	473	304	KGW	MCW	151	2023-06-07
4	78	2021-03-20 00:00:00	2024-10-31 00:00:00	433	473	JEG	HSK	110	2022-05-29
5	79	2024-01-18 00:00:00	2021-07-03 00:00:00	489	448	WOK	XDJ	110	2025-02-11
6	88	2022-08-16 00:00:00	2023-04-03 00:00:00	302	469	ILH	WKI	39	2025-03-19
7	99	2023-08-23 00:00:00	2020-11-13 00:00:00	398	373	DFP	BFH	148	2021-09-17

Total rows: 9 Query complete 00:00:00.816 CRLF Ln 40, Col 20



Object Explorer airport_db/postgres@PostgreSQL 17* public.flights/airp... public.airline/airpo...

Query Scratch Pad

```

48 AND f.sch_departure_time BETWEEN NOW() AND NOW() + INTERVAL '7 days';
49
50 -- task 6
51 CREATE OR REPLACE VIEW delayed_flights AS
52 SELECT
53     f.flight_id,
54     a.airline_name,
55     f.sch_departure_time,
56     f.act_departure_time,
57     EXTRACT(EPOCH FROM (f.act_departure_time - f.sch_departure_time))/3600 AS delay_hours
58 FROM flights f
59 JOIN airline a ON f.airline_id = a.airline_id
60 WHERE (f.act_departure_time - f.sch_departure_time) > INTERVAL '24 hours';
61
62 -- check
63 SELECT * FROM delayed_flights;

```

Data Output Messages Notifications

	flight_id integer	airline_name character varying (50)	sch_departure_time timestamp without time zone	act_departure_time timestamp without time zone	delay_hours numeric
1	1	Alitalia	2022-03-07 00:00:00	2023-11-26 00:00:00	15096.0000000000000000
2	2	South African Airways	2023-03-10 00:00:00	2024-01-19 00:00:00	7560.0000000000000000
3	3	Southwest Airlines	2022-12-20 00:00:00	2024-08-24 00:00:00	14712.0000000000000000
4	5	AirEasy	2020-11-13 00:00:00	2023-10-13 00:00:00	25536.0000000000000000
5	6	Qatar Airways	2021-08-23 00:00:00	2021-12-08 00:00:00	2568.0000000000000000
6	7	Alitalia	2021-11-27 00:00:00	2023-02-06 00:00:00	10464.0000000000000000
7	10	Air India	2023-10-03 00:00:00	2023-11-20 00:00:00	1152.0000000000000000
8	13	Air India	2021-03-27 00:00:00	2022-10-13 00:00:00	13560.0000000000000000

Total rows: 103 Query complete 00:00:00.214 CRLF Ln 63, Col 17

Object Explorer t_db/postgre... X airport_db/postgre... X airport_db/postgre... X airport_db/postgres@PostgreSQL 17* X public.flights/airp... X public.airline/airpo... X

Query History Scratch Pad

```
61 -- check
62 SELECT * FROM delayed_flights;
63
64 -- task 7
65 CREATE OR REPLACE VIEW leffler_thompson_passengers AS
66 SELECT
67     CONCAT(p.first_name, ' ', p.last_name) AS full_name,
68     p.country_of_citizenship AS country
69 FROM passengers p
70 JOIN booking b ON p.passenger_id = b.passenger_id
71 JOIN flights f ON b.flight_id = f.flight_id
72 JOIN airline a ON f.airline_id = a.airline_id
73 WHERE a.airline_name = 'Leffler-Thompson'
74 AND b.booking_platform = 'Leffler-Thompson';
75
76
```

Data Output Messages Notifications

CREATE VIEW

Query returned successfully in 197 msec.

Total rows: Query complete 00:00:00.107

✓ Query returned successfully in 107 msec. X

CRLF Ln 73, Col 13



Object Explorer



airport_db/postgres@PostgreSQL 17

Query

AND b.booking_platform = 'Loyalty-Mompson';

```
75
76
77 -- task 8
78 CREATE OR REPLACE VIEW top_visited_countries AS
79 SELECT
80     ap.country as visited_country,
81     COUNT(b.booking_id) as visit_count
82 FROM flights f
83 JOIN booking b ON f.flight_id = b.flight_id
84 JOIN airport ap ON f.arriving_airport_id = ap.airport_id
85 GROUP BY ap.country
86 ORDER BY visit_count DESC
87 LIMIT 10;
88
89 -- check
90 SELECT * FROM top_visited_countries;
```

Data Output Messages Notifications

SQL

Showing rows: 1 to 10 Page No: 1

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	visited_country	visit_count
3	Germany	23
4	Spain	23
5	India	21
6	Brazil	19
7	Japan	17
8	Australia	16
9	USA	13
10	Italy	7

Total rows: 10

Query complete 00:00:06.255

CRLF Ln 89, Col 9



Object Explorer



t_db/postgre... X airport_db/postgre... X airport_db/postgre... X airport_db/postgres@PostgreSQL 17* X public.flights/airp... X public.airline/airpo... X



- > airport
- > baggage
- > baggage_check
- > boarding_pass
- > booking
- > booking_flight
 - > Columns
 - > Constraints
 - > Indexes
 - > RLS Policies
 - > Rules
 - > Triggers
- > flights
 - > Columns(12)
 - flight_id
 - sch_departure_time
 - sch_arrival_time
 - departing_airport_id
 - arriving_airport_id
 - flight_number
 - arriving_gate
 - airline_id
 - act_departure_time
 - act_arrival_time
 - created_at
 - updated_at
 - > Constraints
 - > Indexes
 - > RLS Policies
 - > Rules

Query Query History

```
92 -- task 9
93 CREATE OR REPLACE VIEW delayed_flights AS
94 SELECT
95     f.flight_id,
96     a.airline_name,
97     f.sch_departure_time,
98     f.act_departure_time,
99     EXTRACT(EPOCH FROM (f.act_departure_time - f.sch_departure_time))/3600 as delay_hours,
100    dep.airport_name as departure_airport,
101    arr.airport_name as arrival_airport,
102    f.arriving_gate,
103    (SELECT COUNT(*) FROM booking WHERE flight_id = f.flight_id) as passenger_count
104 FROM flights f
105 JOIN airline a ON f.airline_id = a.airline_id
106 JOIN airport dep ON f.departing_airport_id = dep.airport_id
107 JOIN airport arr ON f.arriving_airport_id = arr.airport_id
108 WHERE (f.act_departure_time - f.sch_departure_time) > INTERVAL '24 hours';
109
```

Data Output Messages Notifications

CREATE VIEW

Query returned successfully in 788 msec.

Total rows: Query complete 00:00:00.788

CRLF Ln 92, Col 10

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File Object Tools Edit View Window Help

Object Explorer t_db/postgre... X airport_db/postgre... X airport_db/postgre... X airport_db/postgres@PostgreSQL 17* X public.flights/airp... X public.airline/airpo... X :

Query History Scratch Pad

```
94     SELECT
95       f.flight_id,
96       a.airline_name,
97       f.sch_departure_time,
98       f.act_departure_time,
99       EXTRACT(EPOCH FROM (f.act_departure_time - f.sch_departure_time))/3600 as delay_hours,
100      dep.airport_name as departure_airport,
101      arr.airport_name as arrival_airport,
102      f.arriving_gate,
103      (SELECT COUNT(*) FROM booking WHERE flight_id = f.flight_id) as passenger_count
104     FROM flights f
105     JOIN airline a ON f.airline_id = a.airline_id
106     JOIN airport dep ON f.departing_airport_id = dep.airport_id
107     JOIN airport arr ON f.arriving_airport_id = arr.airport_id
108     WHERE (f.act_departure_time - f.sch_departure_time) > INTERVAL '24 hours';
109
110 -- check
111     SELECT * FROM delayed_flights;
```

Data Output Messages Notifications

	flight_id integer	airline_name character varying (50)	sch_departure_time timestamp without time zone	act_departure_time timestamp without time zone	delay_hours numeric	departure_airport character varying (50)	arrival_airport character vary
1	1	Alitalia	2022-03-07 00:00:00	2023-11-26 00:00:00	15096.0000000000000000	Marion Municipal Airport	Esfahan Airpor
2	2	South African Airways	2023-03-10 00:00:00	2024-01-19 00:00:00	7560.0000000000000000	Nyingchi Airport	Kallahshah Al
3	3	Southwest Airlines	2022-12-20 00:00:00	2024-08-24 00:00:00	14712.0000000000000000	Nyingchi Airport	Berlin Branden
4	5	AirEasy	2020-11-13 00:00:00	2023-10-13 00:00:00	25536.0000000000000000	Basango Mboliasa Airport	Metema Airpoi
5	6	Qatar Airways	2021-08-23 00:00:00	2021-12-08 00:00:00	2568.0000000000000000	Nyala Airport	Komatsu Airpc

Total rows: 103 Query complete 00:00:02.257 CRLF Ln 111, Col 16

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File Object Tools Edit View Window Help

Object Explorer t_db/postgre... X airport_db/postgre... X airport_db/postgre... X airport_db/postgres@PostgreSQL 17* X public.flights/airp... X public.airline/airpo... X

airport_db/postgres@PostgreSQL 17

No limit

Query History Scratch Pad

```
103     (SELECT COUNT(*) FROM booking WHERE flight_id = f.flight_id) as passenger_count
104     FROM flights f
105     JOIN airline a ON f.airline_id = a.airline_id
106     JOIN airport dep ON f.departing_airport_id = dep.airport_id
107     JOIN airport arr ON f.arriving_airport_id = arr.airport_id
108     WHERE (f.act_departure_time - f.sch_departure_time) > INTERVAL '24 hours';
109
110 -- check
111 SELECT * FROM delayed_flights;
112
113 -- task 10
114 DROP VIEW IF EXISTS flights_by_date CASCADE;
115 DROP VIEW IF EXISTS bookings_next_week CASCADE;
116 DROP VIEW IF EXISTS top_flight_routes CASCADE;
117 DROP VIEW IF EXISTS flights_by_airline CASCADE;
118 DROP VIEW IF EXISTS delayed_flights CASCADE;
119 DROP VIEW IF EXISTS leffler_thompson_passengers CASCADE;
120 DROP VIEW IF EXISTS top_visited_countries CASCADE;
```

Data Output Messages Notifications

DROP VIEW

Query returned successfully in 374 msec.

Total rows: Query complete 00:00:00.377

CRLF Ln 1, Col 1