

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

- > Constraints
- > Indexes
- > RLS Policies
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- > baggage
- > baggage\_check
- > boarding\_pass
- > booking
- > booking\_flight
- > Columns
- > Constraints
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- > 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

Query Query History

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

Scratch Pad

Data Output Messages Notifications

Showing rows: 1 to 1 Page No: 1 of 1

	flight_id	sch_departure_time	sch_arrival_time	departing_airport_id	arriving_airport_id	flight_number	arriving_gate	airline_id	act_departure_time
	Integer	timestamp without time zone	timestamp without time zone	Integer	Integer	text	character varying (50)	Integer	timestamp with time zone
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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Object Explorer

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- flights
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    - flight\_id
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    - 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

Query Editor

airport\_db/postgres@PostgreSQL 17

Query

```
-- task 1
1 CREATE VIEW flights_by_date AS
2 SELECT *
3 FROM flights
4 WHERE DATE(sch_departure_time) = '2025-01-18';
5
6 SELECT * FROM flights_by_date;
7
8
9 -- task 2
10 CREATE VIEW bookings_next_week AS
11 SELECT b.*, f.sch_departure_time, f.sch_arrival_time
12 FROM booking b
13 JOIN flights f ON b.flight_id = f.flight_id
14 WHERE f.sch_departure_time BETWEEN NOW() AND NOW() + INTERVAL '7 days';
15
```

Scratch Pad

Data Output Messages Notifications

CREATE VIEW

Query returned successfully in 1 secs 501 msec.

Total rows: Query complete 00:00:01.501

✓ Query returned successfully in 1 secs 501 msec. ✕

CRLF Ln 12, Col 14

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File Object Tools Edit View Window Help

Object Explorer

- 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

airport\_db/postgres@PostgreSQL 17

Query Query History

```
-- 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;
```

Scratch Pad

Data Output Messages Notifications

Showing rows: 1 to 5 Page No: 1 of 1

	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

Total rows: 5 Query complete 00:00:06.112 CRLF Ln 30, Col 18

Object Explorer

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  - airline
    - Columns (6)
      - airline\_id
      - airline\_code
      - airline\_name
      - airline\_country
      - created\_at
      - updated\_at
  - Constraints
  - Indexes
  - RLS Policies
  - Rules
  - Triggers
  - airport
  - baggage
  - baggage\_check
  - boarding\_pass

airport\_db/postgres@PostgreSQL 17

No limit

Query Query History

```
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_departure_time timestamp without time zone
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



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Object Explorer

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    - Columns (6)
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      - airline\_code
      - airline\_name
      - airline\_country
      - created\_at
      - updated\_at
    - Constraints
    - Indexes
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    - Triggers
  - airport
  - baggage
  - baggage\_check
  - boarding\_pass

airport\_db/postgres@PostgreSQL 17

Query

```
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
42 -- task 5
43 CREATE OR REPLACE VIEW flights_by_airline AS
44 SELECT f.*, a.airline_name
45 FROM flights f
46 JOIN airline a ON f.airline_id = a.airline_id
47 WHERE a.airline_code = 'AA'
48 AND f.sch_departure_time BETWEEN NOW() AND NOW() + INTERVAL '7 days';
49
```

Query History

Scratch Pad

Data Output Messages Notifications

CREATE VIEW

Query returned successfully in 1 secs 370 msec.

Total rows: Query complete 00:00:01.372 CRLF Ln 49, Col 1

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File Object Tools Edit View Window Help

Object Explorer

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  - > airline
    - > Columns (6)
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      - airline\_code
      - airline\_name
      - airline\_country
      - created\_at
      - updated\_at
    - > Constraints
    - > Indexes
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    - > Rules
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  - > airport
  - > baggage
  - > baggage\_check
  - > boarding\_pass

airport\_db/postgres@PostgreSQL 17

Query

```
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;
```

Query History

Scratch Pad

Data Output Messages Notifications

Showing rows: 1 to 103 Page No: 1 of 1

	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	15096.000000000000
2	2	South African Airways	2023-03-10 00:00:00	2024-01-19 00:00:00	7560.000000000000
3	3	Southwest Airlines	2022-12-20 00:00:00	2024-08-24 00:00:00	14712.000000000000
4	5	AirEasy	2020-11-13 00:00:00	2023-10-13 00:00:00	25536.000000000000
5	6	Qatar Airways	2021-08-23 00:00:00	2021-12-08 00:00:00	2568.000000000000
6	7	Alitalia	2021-11-27 00:00:00	2023-02-06 00:00:00	10464.000000000000
7	10	Air India	2023-10-03 00:00:00	2023-11-20 00:00:00	1152.000000000000
8	13	Air India	2021-03-27 00:00:00	2022-10-13 00:00:00	13560.000000000000

Total rows: 103 Query complete 00:00:00.214

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  - airline
    - Columns (6)
      - airline\_id
      - airline\_code
      - airline\_name
      - airline\_country
      - created\_at
      - updated\_at
    - Constraints
    - Indexes
    - RLS Policies
    - Rules
    - Triggers
  - airport
  - baggage
  - baggage\_check
  - boarding\_pass

airport\_db/postgres@PostgreSQL 17

Query

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

Query History

Scratch Pad

Data Output Messages Notifications

CREATE VIEW

Query returned successfully in 107 msec.

Total rows: Query complete 00:00:00.107

✓ Query returned successfully in 107 msec. ✕

CRLF Ln 73, Col 13

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File Object Tools Edit View Window Help

Object Explorer

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- 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
  - baggage
  - baggage\_check
  - boarding\_pass

airport\_db/postgres@PostgreSQL 17

Query

```
75 AND b.booking_passport = 'Gertter - Thompson';
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;
```

Query History

Scratch Pad

Data Output Messages Notifications

Showing rows: 1 to 10 Page No: 1 of 1

	visited_country character varying (50)	visit_count bigint
3	Germany	25
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



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File Object Tools Edit View Window Help

Object Explorer

- airport
- baggage
- baggage\_check
- boarding\_pass
- booking
- booking\_flight
  - Columns
  - Constraints
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  - 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

airport\_db/postgres@PostgreSQL 17

Query

```
-- task 9
CREATE OR REPLACE VIEW delayed_flights AS
SELECT
    f.flight_id,
    a.airline_name,
    f.sch_departure_time,
    f.act_departure_time,
    EXTRACT(EPOCH FROM (f.act_departure_time - f.sch_departure_time))/3600 as delay_hours,
    dep.airport_name as departure_airport,
    arr.airport_name as arrival_airport,
    f.arriving_gate,
    (SELECT COUNT(*) FROM booking WHERE flight_id = f.flight_id) as passenger_count
FROM flights f
JOIN airline a ON f.airline_id = a.airline_id
JOIN airport dep ON f.departing_airport_id = dep.airport_id
JOIN airport arr ON f.arriving_airport_id = arr.airport_id
WHERE (f.act_departure_time - f.sch_departure_time) > INTERVAL '24 hours';
```

Scratch Pad

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

- 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

airport\_db/postgres@PostgreSQL 17

Query

```
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;
112
```

Query History

Scratch Pad

Data Output

Showing rows: 1 to 103 Page No: 1 of 1

	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 varyi
1	1	Alitalia	2022-03-07 00:00:00	2023-11-26 00:00:00	15096.000000000000	Marion Municipal Airport	Esfahan Airpo
2	2	South African Airways	2023-03-10 00:00:00	2024-01-19 00:00:00	7560.000000000000	Nyingchi Airport	Kailashahar Ai
3	3	Southwest Airlines	2022-12-20 00:00:00	2024-08-24 00:00:00	14712.000000000000	Nyingchi Airport	Berlin Branden
4	5	AirEasy	2020-11-13 00:00:00	2023-10-13 00:00:00	25536.000000000000	Basango Mboliasa Airport	Metema Airpoi
5	6	Qatar Airways	2021-08-23 00:00:00	2021-12-08 00:00:00	2568.000000000000	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

- airport
- baggage
- baggage\_check
- boarding\_pass
- booking
- booking\_flight
  - Columns
  - Constraints
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- 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

```
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;
```

Query History

Scratch Pad

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