```sql
-- 1
create or replace view v_flights_on_date as
select
    f.flight_id,
    f.actual_departure,
    f.actual_arrival,
    dep.airport_name as departure_airport,
    arr.airport_name as arrival_airport,
    a.airline_name
from flights f
join airport dep on f.departure_airport_id = dep.airport_id
join airport arr on f.arrival_airport_id = arr.airport_id
join airline a on f.airline_id = a.airline_id
where date(f.actual_departure) = '2025-11-20';

-- Проверка
select * from v_flights_on_date;
```

Data Output | Messages | Notifications

flight_id integer	actual_departure date	actual_arrival date	departure_airport character varying (50)	arrival_airport character varying (50)	airline_name character varying (50)

Total rows: 0   Query complete 00:00:00.087

```sql
-- 2
create or replace view v_bookings_next_week as
select
    b.booking_id,
    f.flight_id,
    f.actual_departure,
    p.first_name || ' ' || p.last_name as passenger_name,
    dep.airport_name || ' → ' || arr.airport_name as route
from booking_flight bf
join booking b on bf.booking_id = b.booking_id
join passengers p on b.passenger_id = p.passenger_id
join flights f on bf.flight_id = f.flight_id
join airport dep on f.departure_airport_id = dep.airport_id
join airport arr on f.arrival_airport_id = arr.airport_id
where f.actual_departure between current_date and current_date + interval '7 days'
order by f.actual_departure;

select * from v_bookings_next_week;
```

Data Output | Messages | Notifications

booking_id integer	flight_id integer	actual_departure date	passenger_name text	route text

Total rows: 0   Query complete 00:00:00.086

File Object Tools Edit View Window Help

Welcome   Lab1ok/postgres@Lab1* ✕

Lab1ok/postgres@Lab1

No limit

Query   Query History   Scratch Pad ✕

```sql
 1   -- 3
 2 ∨ create or replace view v_top5_routes as
 3   select
 4       dep.country || ' → ' || arr.country as route,
 5       dep.airport_name || ' → ' || arr.airport_name as airports,
 6       count(*) as bookings_count
 7   from booking_flight bf
 8   join flights f on bf.flight_id = f.flight_id
 9   join airport dep on f.departure_airport_id = dep.airport_id
10   join airport arr on f.arrival_airport_id = arr.airport_id
11   group by dep.country, arr.country, dep.airport_name, arr.airport_name
12   order by bookings_count desc
13   limit 5;
14
15   select * from v_top5_routes;
16
17
18
19
```

Data Output   Messages   Notifications

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

	route text	airports text	bookings_count bigint
1	Indonesia → Tanzania	Henri Coandă International Airport → Armidale Airport	18
2	Indonesia → Indonesia	Garbaharey Airport → Henri Coandă International Airport	15
3	United States → Slovenia	Hana Airport → Zephyrhills Municipal Airport	14
4	Brazil → Indonesia	Figari Sud-Corse Airport → Garbaharey Airport	14
5	Philippines → Tanzania	Industrial Airpark → Armidale Airport	11

✓ Successfully run. Total query runtime: 108 msec. 5 rows affected. ✕

Total rows: 5   Query complete 00:00:00.108   CRLF   Ln 15, Col 28

File Object Tools Edit View Window Help

Welcome   Lab1ok/postgres@Lab1* ✕

Lab1ok/postgres@Lab1   ∨

No limit ∨   ■ ▶ ▶ ∨ E ■ ∨

Query   Query History   Scratch Pad ✕

```sql
1   -- 4
2 ∨ create or replace view v_delta_flights as
3   select
4       f.flight_id,
5       f.actual_departure,
6       f.actual_arrival,
7       dep.airport_name as from_airport,
8       arr.airport_name as to_airport
9   from flights f
10  join airport dep on f.departure_airport_id = dep.airport_id
11  join airport arr on f.arrival_airport_id = arr.airport_id
12  join airline a on f.airline_id = a.airline_id
13  where a.airline_name ilike 'delta air lines';
14
15  select * from v_delta_flights;
16
17
18
19
```
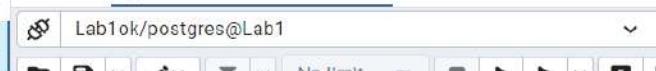
Data Output   Messages   Notifications

flight_id integer	actual_departure date	actual_arrival date	from_airport character varying (50)	to_airport character varying (50)

✓ Successfully run. Total query runtime: 87 msec. 0 rows affected. ✕

Total rows: 0   Query complete 00:00:00.087   CRLF   Ln 15, Col 31
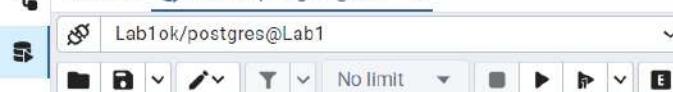
```sql
-- 5
create or replace view v_delta_flights as
select
    f.flight_id,
    f.actual_departure,
    f.actual_arrival,
    dep.airport_name as from_airport,
    arr.airport_name as to_airport
from flights f
join airport dep on f.departure_airport_id = dep.airport_id
join airport arr on f.arrival_airport_id = arr.airport_id
join airline a on f.airline_id = a.airline_id
where a.airline_name ilike 'delta air lines'
  and f.actual_departure between current_date and current_date + interval '7 days';

select * from v_delta_flights;
```

Data Output

flight_id integer	actual_departure date	actual_arrival date	from_airport character varying (50)	to_airport character varying (50)

Total rows: 0   Query complete 00:00:00.085

```sql
 1    -- 6
 2  ∨ create or replace view v_delayed_flights_24h as
 3    select
 4        f.flight_id,
 5        f.scheduled_departure,
 6        f.actual_departure,
 7        f.actual_departure - f.scheduled_departure as delay_interval,
 8        dep.airport_name || ' → ' || arr.airport_name as route,
 9        a.airline_name
10    from flights f
11    join airport dep on f.departure_airport_id = dep.airport_id
12    join airport arr on f.arrival_airport_id = arr.airport_id
13    join airline a on f.airline_id = a.airline_id
14    where f.actual_departure is not null
15      and f.scheduled_departure is not null
16      and f.actual_departure > f.scheduled_departure + interval '24 hours';
17
18    select * from v_delayed_flights_24h;
19
```

Scratch Pad

Data Output   Messages   Notifications

Showing rows: 1 to 494 ✎ Page No: 1 of 1

	flight_id integer	scheduled_departure date	actual_departure date	delay_interval integer	route text	airline_name character varying (50)
1	2	2023-07-21	2024-02-09	203	Figari Sud-Corse Airport → Zephyrhills Municipal Airport	SMM
2	3	2023-03-29	2024-02-21	329	Darchula Airport → Elorza Airport	SMM
3	5	2023-07-03	2023-11-18	138	Hana Airport → Alert Bay Airport	PIR
4	6	2023-07-07	2024-02-19	227	Darchula Airport → Akunaq Heliport	SMM
5	7	2023-10-12	2023-12-04	53	Ocean Falls Seaplane Base → Darchula Airport	SOZ
6	9	2023-05-18	2023-06-17	30	Hana Airport → Pitalito Airport	IFH
7	11	2023-03-28	2024-02-06	315	Delta County Airport → Delta County Airport	YBQ
8	12	2023-03-22	2023-04-28	37	Elorza Airport → Figari Sud-Corse Airport	KKL

Total rows: 494   Query complete 00:00:00.144   CRLF   Ln 18, Col 22

```sql
-- 7
create or replace view v_leffler_thompson_passengers as
select distinct
    p.first_name || ' ' || p.last_name as full_name,
    p.passport_number,
    a.airline_country as citizenship_country
from booking b
join passengers p on b.passenger_id = p.passenger_id
join booking_flight bf on b.booking_id = bf.booking_id
join flights f on bf.flight_id = f.flight_id
join airport arr on f.arrival_airport_id = arr.airport_id
join airline a on f.airline_id = a.airline_id
where b.booking_platform ilike 'Leffler-Thompson';

select * from v_leffler_thompson_passengers;
```

full_name text	passport_number character varying (50)	citizenship_country character varying (50)
Philbert Shambroke	251255686-7	Sudan

File Object Tools Edit View Window Help

Welcome   Lab1ok/postgres@Lab1* ×

Lab1ok/postgres@Lab1

Query   Query History   Scratch Pad ×

```
 1    -- 8
 2  v create or replace view v_top10_visited_countries as
 3    select
 4        arr.country,
 5        count(*) as arrivals_count
 6    from booking_flight bf
 7    join flights f on bf.flight_id = f.flight_id
 8    join airport arr on f.arrival_airport_id = arr.airport_id
 9    group by arr.country
10    order by arrivals_count desc
11    limit 10;
12
13    select * from v_top10_visited_countries;
14
15
16
17
18
19
```

Data Output   Messages   Notifications

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

	country character varying (50)	arrivals_count bigint
1	China	232
2	Indonesia	167
3	Philippines	137
4	Tanzania	78
5	United States	62
6	Russia	59
7	Poland	49
8	Slovenia	48

✓ Successfully run. Total query runtime: 119 msec. 10 rows affected. ×

Total rows: 10   Query complete 00:00:00.119   CRLF   Ln 13, Col 23

```sql
-- 9
create or replace view v_top5_routes as
select
    dep.country || ' → ' || arr.country as route,
    dep.airport_name || ' → ' || arr.airport_name as airports,
    count(*) as bookings_count,
    round(100.0 * count(*) / sum(count(*)) over (), 2) as percent_of_total
from booking_flight bf
join flights f on bf.flight_id = f.flight_id
join airport dep on f.departure_airport_id = dep.airport_id
join airport arr on f.arrival_airport_id = arr.airport_id
group by dep.country, arr.country, dep.airport_name, arr.airport_name
order by bookings_count desc
limit 5;

select * from v_top5_routes;
```

	route text	airports text	bookings_count bigint	percent_of_total numeric
1	Indonesia → Tanzania	Henri Coandă International Airport → Armidale Airport	18	1.80
2	Indonesia → Indonesia	Garbaharey Airport → Henri Coandă International Airport	15	1.50
3	United States → Slovenia	Hana Airport → Zephyrhills Municipal Airport	14	1.40
4	Brazil → Indonesia	Figari Sud-Corse Airport → Garbaharey Airport	14	1.40
5	Philippines → Tanzania	Industrial Airpark → Armidale Airport	11	1.10

Successfully run. Total query runtime: 103 msec. 5 rows affected.

Total rows: 5   Query complete 00:00:00.103

```sql
-- 10
drop view if exists v_flights_on_date;
drop view if exists v_bookings_next_week;
drop view if exists v_top5_routes;
drop view if exists v_delta_flights;
drop view if exists v_delayed_flights_24h;
drop view if exists v_leffler_thompson_passengers;
drop view if exists v_top10_visited_countries;


select schemaname, viewname from pg_views
where schemaname = 'public' and viewname like 'v_%';
```

Data Output   Messages   Notifications

	schemaname name	viewname name
1	public	v_bookings_next_week
2	public	v_delayed_flights_24h
3	public	v_delta_flights
4	public	v_flights_on_date
5	public	v_top10_visited_countries
6	public	v_top5_routes

Showing rows: 1 to 6   Page No: 1   of 1

✓ Successfully run. Total query runtime: 115 msec. 6 rows affected. ✕

Total rows: 6   Query complete 00:00:00.115   CRLF   Ln 12, Col 36