Lab 2 DB Version control

Database Explorer

DDL

postgres@localhost
lab2
tables 10
airline
airport
baggage
baggage_check
boarding_pass
booking
booking_flight
flights
passengers
security_check
views 1
public
tables 3

console_5 flights

Tx: Auto Playground postgres.lab2

```
1  create view task1_8 as
2  select
3  flight_id, sch_departure_time, sch_arrival_time, departing_airport_id, arriving_airport_id
4  from flights
5  where sch_departure_time::date = '2025-09-29';
6
7
```

Services

Database
postgres@localhost
console_5 28 ms
flights 915 ms
flights
flights
flights
flights 915 ms

```
[2025-11-19 08:29:16] postgres.lab2> create view task1_8 as
                                     select
                                     flight_id, sch_departure_time, sch_arrival_time, departing_airport_id, arriving_airport_id
                                     from flights
                                     where sch_departure_time::date = '2025-09-29'
[2025-11-19 08:29:16] completed in 15 ms
```

Database Consoles > postgres@localhost > console_5 7:1 LF UTF-8 4 spaces

Lab 2 DB Version control

Database Explorer

DDL

- postgres@localhost 1 of 5
  - postgres 2 of 4
    - lab2
      - tables 10
        - airline
        - airport
        - baggage
        - baggage_check
        - boarding_pass
        - booking
        - booking_flight
        - flights
        - passengers
        - security_check
        - views 2
      - public
        - tables 3
        - routines 4
        - sequences 1
      - Database Objects
    - Server Objects

console_5 flights

Tx: Auto Playground postgres.lab2

```
1  create view task2_8 as
2  select
3    b.booking_id, b.flight_id, b.passenger_id, b.booking_platform, f.sch_departure_time
4  from booking b
5  join flights f 1..n<->1: on f.flight_id = b.flight_id
6  where f.sch_departure_time >= now() and f.sch_departure_time <  now() + interval '7 days';
7
```

Services

- Database
  - postgres@localhost
    - console_5 28 ms
    - flights 915 ms
      - flights
      - flights
      - flights

```
[2025-11-19 08:33:32] postgres.lab2> create view task2_8 as
                                     select
                                       b.booking_id, b.flight_id, b.passenger_id, b.booking_platform, f.sch_departure_time
                                     from booking b
                                     join flights f on f.flight_id = b.flight_id
                                     where f.sch_departure_time >= now() and f.sch_departure_time <  now() + interval '7 days'
[2025-11-19 08:33:32] completed in 11 ms
```

Database Consoles > postgres@localhost > console_5 7:1 LF UTF-8 4 spaces

Lab 2 DB Version control

Database Explorer

DDL

- postgres@localhost 1 of 5
  - postgres 2 of 4
    - lab2
      - tables 10
        - airline
        - airport
        - baggage
        - baggage_check
        - boarding_pass
        - booking
        - booking_flight
        - flights
        - passengers
        - security_check
      - views 3
    - public

console_5 × | flights

Tx: Auto | Playground | postgres.lab2

```
1  create view top5_routes_by_bookings as
2  select f.departing_airport_id, f.arriving_airport_id, count(b.booking_id) AS bookings_count
3  from booking_flight bf
4  join booking b          1..n<->1: ON b.booking_id = bf.booking_id
5  join flights f          1..n<->1: ON b.flight_id = f.flight_id
6  join airport arr        1..n<->1: ON arr.airport_id = f.arriving_airport_id
7  group by
8      f.departing_airport_id,
9      f.arriving_airport_id
10 order by bookings_count desc
11 limit 5;
```

Services

- Database
  - postgres@localhost
    - console_5 19 ms
    - flights 915 ms
      - flights
      - flights
      - flights
      - flights 915 ms

```
[2025-11-19 08:40:22] postgres.lab2> create view top5_routes_by_bookings as
                                     select f.departing_airport_id, f.arriving_airport_id, count(b.booking_id) AS bookings_count
                                     from booking_flight bf
                                     join booking b          ON b.booking_id = bf.booking_id
                                     join flights f         ON b.flight_id = f.flight_id
                                     join airport arr         ON arr.airport_id = f.arriving_airport_id
                                     group by
                                         f.departing_airport_id,
                                         f.arriving_airport_id
                                     order by bookings_count desc
                                     limit 5
[2025-11-19 08:40:22] completed in 8 ms
```

Lab 2 DB Version control

Database Explorer

DDL

- postgres@localhost 1 of 5
  - postgres 2 of 4
    - lab2
      - tables 10
        - airline
        - airport
        - baggage
        - baggage_check
        - boarding_pass
        - booking
        - booking_flight
        - flights
        - passengers
        - security_check
      - views 4
    - public

console_5 × | airline

Tx: Auto | Playground | postgres.lab2

```
1 create view task_4 as
2 select f.flight_id, f.sch_departure_time, f.sch_arrival_time, a.airline_name
3 from flights f
4 join airline a          1..n<->1: ON f.airline_id = a.airline_id
5 where a.airline_name = 'KazAir';
```

Services

- Database
  - postgres@localhost
    - console_5 19 ms
    - flights 915 ms
      - flights
      - flights
      - flights
    - airline 381 ms

```
[2025-11-19 08:44:39] postgres.lab2> create view task_4 as
                                     select f.flight_id, f.sch_departure_time, f.sch_arrival_time, a.airline_name
                                     from flights f
                                     join airline a          ON f.airline_id = a.airline_id
                                     where a.airline_name = 'KazAir'
[2025-11-19 08:44:39] completed in 8 ms
```

Database Consoles > postgres@localhost > console_5 5:33 LF UTF-8 4 spaces

Database Explorer

DDL

- postgres@localhost 1 of 5
  - postgres 2 of 4
    - lab2
      - tables 10
        - airline
        - airport
        - baggage
        - baggage_check
        - boarding_pass
        - booking
        - booking_flight
        - flights
        - passengers
        - security_check
      - views 5
    - public

console_5 × | airline

Tx: Auto | Playground | postgres.lab2

```
1 ✓ create view task_5 as
2   select f.flight_id, f.sch_departure_time, f.sch_arrival_time, a.airline_name
3   from flights f
4   join airline a          1..n<->1: ON f.airline_id = a.airline_id
5   where a.airline_name = 'KazAir'
6   and f.sch_arrival_time between current_date and current_date + interval '7 days';
```

Services

- Database
  - postgres@localhost
    - console_5 348 ms
    - flights 915 ms
      - flights
      - flights
      - flights
    - airline 381 ms

```
                                    from flights f
                                    join airline a          ON f.airline_id = a.airline_id
                                    where a.airline_name = 'KazAir'
[2025-11-19 08:44:39] completed in 8 ms
[2025-11-19 09:15:16] Connected
[2025-11-19 09:15:16] postgres.lab2> set search_path = "lab2"
[2025-11-19 09:15:16] completed in 1 ms
[2025-11-19 09:15:16] postgres.lab2> create view task_5 as
                                    select f.flight_id, f.sch_departure_time, f.sch_arrival_time, a.airline_name
                                    from flights f
                                    join airline a          ON f.airline_id = a.airline_id
                                    where a.airline_name = 'KazAir'
                                    and f.sch_arrival_time between current_date and current_date + interval '7 days'
[2025-11-19 09:15:16] completed in 11 ms
```

Lab 2 DB Version control

Database Explorer

DDL

- postgres@localhost 1 of 5
  - postgres 2 of 4
    - lab2
      - tables 10
        - airline
        - airport
        - baggage
        - baggage_check
        - boarding_pass
        - booking
        - booking_flight
        - flights
        - passengers
        - security_check
      - views 6
    - public

console_5 × | airline

Tx: Auto | Playground | postgres.lab2

```
1 create view task_6 as
2 select flight_id, sch_departure_time, act_departure_time, act_arrival_time
3 from flights
4 where act_departure_time > sch_departure_time + interval '1 day';
```

Services

- Database
  - postgres@localhost
    - console_5 23 ms
    - flights 915 ms
      - flights
      - flights
      - flights
    - airline 381 ms

```
[2025-11-19 09:15:16] postgres.lab2> set search_path = "lab2"
[2025-11-19 09:15:16] completed in 1 ms
[2025-11-19 09:15:16] postgres.lab2> create view task_5 as
                                     select f.flight_id, f.sch_departure_time, f.sch_arrival_time, a.airline_name
                                     from flights f
                                     join airline a          ON f.airline_id = a.airline_id
                                     where a.airline_name = 'KazAir'
                                     and f.sch_arrival_time between current_date and current_date + interval '7 days'
[2025-11-19 09:15:16] completed in 11 ms
[2025-11-19 09:18:47] postgres.lab2> create view task_6 as
                                     select flight_id, sch_departure_time, act_departure_time, act_arrival_time
                                     from flights
                                     where act_departure_time > sch_departure_time + interval '1 day'
[2025-11-19 09:18:47] completed in 7 ms
```

Database Consoles > postgres@localhost > console_5 4:67 LF UTF-8 4 spaces

Lab 2 DB Version control

Database Explorer

DDL

- postgres@localhost 1 of 5
  - postgres 2 of 4
    - lab2
      - tables 10
        - airline
        - airport
        - baggage
        - baggage_check
        - boarding_pass
        - booking
        - booking_flight
        - flights
        - passengers
        - security_check
      - views 7
    - public

console_5 × | booking | airline

Tx: Auto | Playground | postgres.lab2

```
1  create view task_7 as
2  select
3      p.passenger_id,
4      p.first_name || ' ' || p.last_name as full_name,
5      p.country_of_citizenship as country_of_origin
6  from passengers p
7  join booking b 1<->1..n: on b.passenger_id = p.passenger_id
8  where b.booking_platform = 'blatform_1';
```

1

Services

- Database
  - postgres@localhost
    - booking 378 ms
    - console_5 24 ms
    - flights 915 ms
      - flights
      - flights
      - flights
    - airline 381 ms

```
[2025-11-19 09:21:19] postgres.lab2> create view task_7 as
                                     select
                                         p.passenger_id,
                                         p.first_name || ' ' || p.last_name as full_name,
                                         p.country_of_citizenship as country_of_origin
                                     from passengers p
                                     join booking b on b.passenger_id = p.passenger_id
                                     where b.booking_platform = 'blatform_1'
[2025-11-19 09:21:19] completed in 8 ms
```

Database Consoles > postgres@localhost > console_5 8:41 LF UTF-8 4 spaces

Lab 2 DB Version control

Database Explorer

DDL

- postgres@localhost 1 of 5
  - postgres 2 of 4
    - lab2
      - tables 10
        - airline
        - airport
        - baggage
        - baggage_check
        - boarding_pass
        - booking
        - booking_flight
        - flights
        - passengers
        - security_check
      - views 8
    - public

console_5 × | booking | airline

Tx: Auto | Playground | postgres.lab2

```
1  create view task_8 as
2  select
3      a.country, count(b.booking_id) AS visits_count
4  from booking_flight bf
5  join booking b  1..n<->1: on bf.booking_id = b.booking_id
6  join flights f  1..n<->1: on f.flight_id = b.flight_id
7  join airport a  1..n<->1: on a.airport_id = f.arriving_airport_id
8  group by a.country
9  order by visits_count desc
10 limit 10;
```

Services

Database
- postgres@localhost
  - booking 378 ms
  - console_5 23 ms
  - flights 915 ms
    - flights
    - flights
    - flights
  - airline 381 ms

```
                                    from passengers p
                                    join booking b on b.passenger_id = p.passenger_id
                                    where b.booking_platform = 'blatform_1'
[2025-11-19 09:21:19] completed in 8 ms
[2025-11-19 09:24:18] postgres.lab2> create view task_8 as
                                    select
                                        a.country, count(b.booking_id) AS visits_count
                                    from booking_flight bf
                                    join booking b on bf.booking_id = b.booking_id
                                    join flights f   on f.flight_id = b.flight_id
                                    join airport a on a.airport_id = f.arriving_airport_id
                                    group by a.country
                                    order by visits_count desc
                                    limit 10
[2025-11-19 09:24:18] completed in 10 ms
```

Database Consoles > postgres@localhost > console_5 10:10 LF UTF-8 4 spaces

Lab 2 DB Version control

Database Explorer

DDL

- postgres@localhost 1 of 5
  - postgres 2 of 4
    - lab2
      - tables 10
        - airline
        - airport
        - baggage
        - baggage_check
        - boarding_pass
        - booking
        - booking_flight
        - flights
        - passengers
        - security_check
      - views 9
    - public

console_5 × | booking | airline

Tx: Auto | Playground | postgres.lab2

```sql
CREATE OR REPLACE VIEW task_9 AS
SELECT DISTINCT
    p.passenger_id,
    p.first_name || ' ' || p.last_name AS full_name,
    p.country_of_citizenship AS country_of_origin,
    b.booking_id,
    b.ticket_price
FROM passengers p
JOIN booking b 1<->1..n: ON b.passenger_id = p.passenger_id
WHERE b.booking_platform = 'platform_1';
```

Services

- Database
  - postgres@localhost
    - booking 378 ms
    - console_5 17 ms
    - flights 915 ms
      - flights
      - flights
      - flights
    - airline 381 ms

```
[2025-11-19 09:25:53] postgres.lab2> CREATE OR REPLACE VIEW task_9 AS
                                     SELECT DISTINCT
                                         p.passenger_id,
                                         p.first_name || ' ' || p.last_name AS full_name,
                                         p.country_of_citizenship AS country_of_origin,
                                         b.booking_id,
                                         b.ticket_price
                                     FROM passengers p
                                     JOIN booking b ON b.passenger_id = p.passenger_id
                                     WHERE b.booking_platform = 'platform_1'
[2025-11-19 09:25:53] completed in 7 ms
```

Database Consoles > postgres@localhost > console_5 10:41 LF UTF-8 4 spaces

Lab 2 DB Version control

Database Explorer

DDL

- postgres@localhost 1 of 5
  - postgres 2 of 4
    - lab2
      - tables 10
        - airline
        - airport
        - baggage
        - baggage_check
        - boarding_pass
        - booking
        - booking_flight
        - flights
        - passengers
        - security_check
    - public
      - tables 3

console_5 × | booking | airline

Tx: Auto | Playground | postgres.lab2

```
1 ✓ drop view task1_8
2 ✓ drop view task2_8
3 ✓ drop view top5_routes_by_bookings
4 ✓ drop view task_4
5 ✓ drop view task_5
6 ✓ drop view task_6
7 ✓ drop view task_7
8 ✓ drop view task_8
9 ✓ drop view task_9
```

17

Services

- Database
  - postgres@localhost
    - booking 378 ms
    - console_5 17 ms
    - flights 915 ms
      - flights
      - flights
      - flights
    - airline 381 ms

Output | postgres.information_schema.views

```
[2025-11-19 09:31:00] completed in 2 ms
[2025-11-19 09:31:00] postgres.lab2> drop view task_4
[2025-11-19 09:31:00] completed in 3 ms
[2025-11-19 09:31:00] postgres.lab2> drop view task_5
[2025-11-19 09:31:00] completed in 3 ms
[2025-11-19 09:31:00] postgres.lab2> drop view task_6
[2025-11-19 09:31:00] completed in 3 ms
[2025-11-19 09:31:00] postgres.lab2> drop view task_7
[2025-11-19 09:31:00] completed in 2 ms
[2025-11-19 09:31:00] postgres.lab2> drop view task_8
[2025-11-19 09:31:00] completed in 3 ms
[2025-11-19 09:31:00] postgres.lab2> drop view task_9
[2025-11-19 09:31:00] completed in 3 ms
```

Database Consoles > postgres@localhost > console_5 9:17 LF UTF-8 4 spaces