

The screenshot shows a PostgreSQL database management interface with the following details:

- Top Bar:** Includes icons for file operations, a search bar labeled "laboratory\_work2", "Version control", and a gear icon.
- Database Explorer:** Shows the database structure:
  - Schema: fank\_emp (2 objects)
  - Table: lab2 (3 objects)
    - Information Schema
    - pg\_catalog
    - public
  - Tables (11 objects): airline, airport, baggage, baggage\_check, boarding\_pass, booking, booking\_flight, flights, passenger\_me, passengers, security\_check.
  - Database Objects
  - Postgres (1 of 3)
  - Server Objects
- Console:** Multiple consoles are listed at the top: console\_56, console\_58 (selected), console\_59, console\_60, console\_61, console\_62, console\_63, console\_64, console\_65. The selected console (console\_58) contains the following SQL code:

```
--Task1- View
CREATE VIEW flights_on_specific_date AS
SELECT flight_id, sch_departure_time, sch_arrival_time, departing_airport_id, arriving_airport_id
FROM flights
WHERE sch_departure_time::date = '22025-09-24';
```
- Bottom Bar:** Services, Database Consoles > fank\_emp > console\_58, and status indicators (8:1 CRLF UTF-8 4 space).

The screenshot shows a dark-themed interface of a database management tool, likely pgAdmin or a similar PostgreSQL client.

**Top Bar:**

- LW laboratory\_work2
- Version control
- File, Database, Table, Query, Help icons
- Search and Settings icons

**Database Explorer:**

- Tree view of database objects:
  - fank\_emp (2)
  - lab2 (3)
    - information\_schema
    - pg\_catalog
    - public
  - tables (11)
    - airline
    - airport
    - baggage
    - baggage\_check
    - boarding\_pass
    - booking
    - booking\_flight
    - flights
    - passanger\_me
    - passengers
    - security\_check
  - Database Objects
  - postres (1 of 3)
  - Server Objects
- DDL (Data Definition Language) icon

**Console:**

- Consoles: console\_56, console\_58, **console\_59**, console\_60, console\_61, console\_62, console\_63, console\_64, console\_65
- Toolbars: Run, Stop, Refresh, Tx: Auto, Playground
- Code Editor:

```
--Task2
CREATE VIEW bookings_next_week AS
SELECT b.booking_id, b.passenger_id, b.flight_id, b.booking_platform, f.sch_departure_time
FROM booking b
JOIN flights f ON b.flight_id = f.flight_id
WHERE f.sch_departure_time BETWEEN CURRENT_DATE AND CURRENT_DATE + INTERVAL '7 days';
```

LW laboratory\_work2 ▾ Version control ▾

Database Explorer

console\_56 console\_58 console\_59 console\_60 × console\_61 console\_62 console\_63 console\_64 console\_65

+ | - | ⌂ | ⌂ | DDL >

fank\_emp [2]

lab2 [3]

information\_schema

pg\_catalog

public

tables [11]

airline

airport

baggage

baggage\_check

boarding\_pass

booking

booking\_flight

flights

passanger\_me

passengers

security\_check

Database Objects

postgres [1 of 3]

Server Objects

--Task3

CREATE VIEW top\_5\_popular\_routes AS  
SELECT f.departing\_airport\_id, f.arriving\_airport\_id, COUNT(b.booking\_id) AS booking\_count  
FROM booking\_flight bf  
JOIN booking b 1<->1: ON bf.booking\_id = b.booking\_id  
JOIN flights f 1..n<->1: ON bf.flight\_id = f.flight\_id  
GROUP BY f.departing\_airport\_id, f.arriving\_airport\_id  
ORDER BY booking\_count DESC  
LIMIT 5;

## Services

The screenshot shows a PostgreSQL database management interface with the following components:

- Top Bar:** Includes icons for file operations (New, Open, Save, Close, Print, Find, Copy, Paste, Undo, Redo), a "laboratory\_work2" tab, "Version control" dropdown, and system icons.
- Database Explorer (Left Panel):** Shows the database schema for "fank\_emp".
  - Tables: airline, airport, baggage, baggage\_check, boarding\_pass, booking, booking\_flight, flights, passanger\_me, passengers, security\_check.
  - Database Objects: Database Objects (1 of 3).
  - Server Objects: Server Objects.
- Console Tab Bar:** Displays multiple tabs: "console\_56", "console\_58", "console\_59", "console\_60", "console\_61" (selected), "console\_62", "console\_63", "console\_64", and "console\_65".
- Query Editor (Right Panel):** A code editor window titled "Playground" with the following SQL query:

```
--Task4
CREATE VIEW airline_flights AS
SELECT f.flight_id, f.sch_departure_time, f.sch_arrival_time, a.airline_name
FROM flights f
JOIN airline a 1..n<->1: ON f.airline_id = a.airline_id
WHERE a.airline_name = 'KBTU_AIR';
```

## Services

Database Consoles > fank\_emp > console\_61

7:25 (9 chars) CRLF UTF-8 4 spaces

LW laboratory\_work2 ▾ Version control ▾

Database Explorer

console\_56 console\_58 console\_59 console\_60 console\_61 console\_62 × console\_63 console\_64 console\_65

+ | - | ⌂ | ⌂ | ⌂ | ⌂ | DDL >

fank\_emp [2]

lab2 [3]

information\_schema

pg\_catalog

public

tables 11

airline

airport

baggage

baggage\_check

boarding\_pass

booking

booking\_flight

flights

passanger\_me

passengers

security\_check

Database Objects

postres 1 of 3

Server Objects

--Task5

CREATE OR REPLACE VIEW airline\_flights\_next\_7\_days AS

SELECT f.flight\_id, f.sch\_departure\_time, f.sch\_arrival\_time, a.airline\_name

FROM flights f

JOIN airline a 1..n->-1: ON f.airline\_id = a.airline\_id

WHERE a.airline\_name = 'KBTU\_AIR'

AND f.sch\_departure\_time BETWEEN CURRENT\_DATE AND CURRENT\_DATE + INTERVAL '7 days';

Playground ▾

Tx: Auto ▾

7:25 (8 chars) CRLF UTF-8 4 spaces

The screenshot shows a Database Explorer interface with a sidebar and a main query editor.

**Database Explorer Sidebar:**

- Project: laboratory\_work2
- Version control: Version control
- Icons for Data, Scripts, DDL, and Tables
- Tables section expanded, showing 11 tables: airline, airport, baggage, baggage\_check, boarding\_pass, booking, booking\_flight, flights, passenger\_me, passengers, security\_check.
- Database Objects, postgres (1 of 3), and Server Objects sections.

**Main Query Editor:**

- Consoles: console\_56, console\_58, console\_59, console\_60, console\_61, console\_62, console\_63 (selected), console\_64, console\_65.
- Toolbar: New, Open, Save, Copy, Paste, Run, Stop, Refresh, Tx: Auto, Playground.
- Code:

```
--Task6
CREATE VIEW delayed_flights 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';
```

## Services

Database Consoles > fank\_emp > console\_63

6:66 CRLF UTF-8 4 space

The screenshot shows a PostgreSQL database management interface with the following components:

- Top Bar:** Includes icons for file operations (New, Open, Save, Close, Print, Find, Copy, Paste, Undo, Redo), a tab labeled "laboratory\_work2", a "Version control" dropdown, and system status icons.
- Database Explorer (Left Panel):** Shows the database schema structure:
  - Schema: fank\_emp (2 objects)
  - Table: lab2 (3 objects)
    - Information Schema
    - pg\_catalog
    - public
  - Table: tables (11 objects)
    - airline
    - airport
    - baggage
    - baggage\_check
    - boarding\_pass
    - booking
    - booking\_flight
    - flights
    - passanger\_me
    - passengers
    - security\_check
  - Database Objects
  - Postgres (1 of 3)
  - Server Objects
- Console Tab:** Labeled "console\_64" (highlighted in blue). It contains a query editor with the following SQL code:

```
--Task7
CREATE VIEW passengers_on_leffler_thompson AS
SELECT p.first_name || ' ' || p.last_name AS full_name, p.country_of_citizenship
FROM passengers p
JOIN booking b 1<->1..n: ON p.passenger_id = b.passenger_id
WHERE b.booking_platform = 'Leffler-Thompson';
```
- Bottom Status Bar:** Shows "Services", "Database Consoles > fank\_emp > console\_64", and file statistics: "8:1 CRLF UTF-8 4 space".

The screenshot shows a dark-themed interface for a database management system. At the top, there are several icons: a square with a dot, three horizontal lines, a yellow square with 'LW', a dropdown menu, a magnifying glass, a search icon, and a gear icon.

The top navigation bar includes the project name 'laboratory\_work2' and a 'Version control' dropdown. To the right are icons for a database, a play button, a folder, and an ellipsis.

The main area has tabs for 'Database Explorer' and multiple database consoles: 'console\_56', 'console\_58', 'console\_59', 'console\_60', 'console\_61', 'console\_62', 'console\_63', 'console\_64', and 'console\_65'. 'console\_65' is currently selected, indicated by a blue underline.

The Database Explorer sidebar shows a tree structure of database objects:

- fank\_emp (2)
- lab2 (3)
  - information\_schema
  - pg\_catalog
  - public
    - tables (11)
      - airline
      - airport
      - baggage
      - baggage\_check
      - boarding\_pass
      - booking
      - booking\_flight
      - flights
      - passanger\_me
      - passengers
      - security\_check
    - Database Objects
  - postgres (1 of 3)
  - Server Objects

The central workspace contains a code editor with the following SQL query:

```
--Task8
CREATE VIEW top_10_most_visited_countries AS
SELECT a.country, COUNT(b.booking_id) AS visit_count
FROM booking_flight bf
JOIN booking b 1<->1: ON bf.booking_id = b.booking_id
JOIN flights f 1.n->>1: ON bf.flight_id = f.flight_id
JOIN airport a 1.n->>1: ON f.arriving_airport_id = a.airport_id
GROUP BY a.country
ORDER BY visit_count DESC
LIMIT 10;
```

## Services

Database Consoles > fank\_emp > console\_65

10:26 CRLF UTF-8 4 spaces

The screenshot shows a PostgreSQL database management interface with the following components:

- Top Bar:** Includes icons for file operations (New, Open, Save, etc.), a "laboratory\_work2" tab, "Version control", and system status.
- Database Explorer (Left Panel):** Shows the database schema structure:
  - Schema: fank\_emp (2 objects)
  - Table: lab2 (3 objects)
    - Information Schema
    - pg\_catalog
    - public
  - Table: tables (11 objects)
    - airline
    - airport
    - baggage
    - baggage\_check
    - boarding\_pass
    - booking
    - booking\_flight
    - flights
    - passanger\_me
    - passengers
    - security\_check
  - Database Objects
  - Postgres (1 of 3)
  - Server Objects
- Query Editor (Right Panel):** Displays a code editor with a green checkmark icon indicating successful execution.
  - Console: console\_66 (selected)
  - Tool Buttons: Refresh, Run, Stop, Save, Tx: Auto, Playground.
  - Code:

```
--Task9
CREATE OR REPLACE VIEW airline_flights_with_passenger_count AS
SELECT f.flight_id, f.sch_departure_time, f.sch_arrival_time, a.airline_name,
       COUNT(b.booking_id) AS passenger_count
FROM flights f
JOIN airline a 1..n->1: ON f.airline_id = a.airline_id
JOIN booking_flight bf 1<->1..n: ON f.flight_id = bf.flight_id
JOIN booking b 1<->1: ON bf.booking_id = b.booking_id
WHERE a.airline_name = 'KBTU_AIR'
GROUP BY f.flight_id, a.airline_name;
```

The screenshot shows a PostgreSQL database management interface with the following details:

- Top Bar:** Includes icons for file operations (New, Open, Save, etc.), a search bar, and a settings gear icon.
- Left Sidebar (Database Explorer):** Shows the database schema structure:
  - Schema: fank\_emp (2 objects)
  - Table: lab2 (3 objects)
    - Information Schema
    - pg\_catalog
    - public
  - Tables (11 objects):
    - airline
    - airport
    - baggage
    - baggage\_check
    - boarding\_pass
    - booking
    - booking\_flight
    - flights
    - passanger\_me
    - passengers
    - security\_check
  - Database Objects
  - Postgres (1 of 3)
  - Server Objects
- Central Area:** A list of SQL commands to drop specific views:
  - Task10
  - 
  - 3 ✓ DROP VIEW IF EXISTS flights\_on\_specific\_date;
  - 4 ✓ DROP VIEW IF EXISTS bookings\_next\_week;
  - 5 ✓ DROP VIEW IF EXISTS top\_5\_popular\_routes;
  - 6 ✓ DROP VIEW IF EXISTS airline\_flights;
  - 7 ✓ DROP VIEW IF EXISTS airline\_flights\_next\_7\_days;
  - 8 ✓ DROP VIEW IF EXISTS delayed\_flights;
  - 9 ✓ DROP VIEW IF EXISTS passengers\_on\_leffler\_thompson;
  - 10 ✓ DROP VIEW IF EXISTS top\_10\_most\_visited\_countries;
  - 11 ✓ DROP VIEW IF EXISTS airline\_flights\_with\_passenger\_count;

## Services

Database Consoles > fank\_emp > console\_67

11:55 CRLF UTF-8 4 spaces