

1 task

The screenshot shows the pgAdmin 4 interface. In the Object Explorer, the database 'MY DB' is selected. Under 'PostgreSQL 17', the 'airport_2' schema is expanded, showing tables like 'airline', 'boarding_pass', 'baggage_check', 'booking', 'flight', and 'pass'. The 'booking' table has columns: booking_id [PK] integer, passenger_id integer, booking_platform character varying(50), created_at date, update_at date, status character varying(50), price numeric(7,2), and ticket_discount integer.

In the Query tab, the following SQL code is run:

```
5891 --lab 8
5892 --1
5893 --without error
5894 BEGIN;
5895 DELETE FROM boarding_pass WHERE booking_id = 500;
5896 DELETE FROM baggage_check WHERE booking_id = 500;
5897 DELETE FROM booking_flight WHERE booking_id = 500;
5898 DELETE FROM booking WHERE booking_id = 500;
5899 COMMIT;
```

The Data Output tab shows the results of the last query:

booking_id	passenger_id	booking_platform	created_at	update_at	status	price	ticket_discount
500	5	79	2023-04-25	2023-04-02	Male	5435.95	[null]

A message box in the bottom right corner states: "You are currently running version 9.6 of pgAdmin 4, however the current version is 9.9." It also includes a link to "Please click here for more information."

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In the Query tab, the following SQL code is run:

```
5902 SELECT *FROM booking where booking_id = 500;
5903 --with error
5904 BEGIN;
5905 DELETE FROM boarding_pass WHERE booking_id = 5;
5906 DELETE FROM baggage_check WHERE booking_id = 5;
5907 DELETE FROM booking_flight WHERE booking_id = 5;
5908 DELETE FROM booking WHERE booking_id = 5;
5909
5910 ROLLBACK;
```

The Data Output tab shows the results of the last query:

booking_id	passenger_id	booking_platform	created_at	update_at	status	price	ticket_discount
5	5	79	Fisher-McGlyn	2023-04-25	2023-04-02	Male	5435.95

A message box in the bottom right corner states: "You are currently running version 9.6 of pgAdmin 4, however the current version is 9.9." It also includes a link to "Please click here for more information."

2 task

The screenshot shows the pgAdmin 4 interface connected to a PostgreSQL 17 database. The left sidebar displays the Object Explorer with various schema and table structures. The main window contains a query editor with the following SQL code:

```
5914
5915 SELECT * FROM booking WHERE booking_id = 5;
5916
5917
5918 -->
5919 BEGIN;
5920 UPDATE flights SET scheduled_departure = '2025-12-09'
5921 WHERE flight_id = 1000;
5922 COMMIT;
5923
5924
5925 SELECT * FROM flights WHERE flight_id = 1000;
5926
5927
5928
5929
5930
5931
```

The Data Output tab shows the results of the last query:

	flight_id	flight_no	scheduled_departure	scheduled_arrival	departure_airport_id	arrival_airport_id	departing_gate	arriving_gate	airline_id	status
1	1000	US-IL	2025-12-09	2024-03-07	9	4	768	29	22	Delayed

A status message in the bottom right corner states: "You are currently running version 9.6 of pgAdmin 4, however the current version is 9.9." A link is provided for more information.

Total rows: 1 Query complete 00:00:00.056

Please click [here](#) for more information.

CRLF Ln 5926, Col 1

3 task

The screenshot shows the pgAdmin 4 interface with the following details:

- Object Explorer:** On the left, under "MY DB", there are sections for Servers, Databases, and Tables. The "Tables" section for the "airport_2" database is expanded, showing the "airline" table and its six columns: airline_id, airline_code, airline_name, airline_country, created_at, and update_at.
- Query Editor:** The main window contains a query editor with the following SQL code:

```
5418 --3
5419 BEGIN;
5420
5421 SELECT * FROM booking b
5422 JOIN booking_flight bf ON b.booking_id = bf.booking_id
5423 JOIN flights f ON f.flight_id = bf.flight_id
5424 WHERE f.flight_id = 101;
5425
5426 UPDATE booking b
5427 SET price = b.price - 10
5428 FROM booking_flight bf
5429 JOIN flights f ON f.flight_id = bf.flight_id
5430 WHERE b.booking_id = bf.booking_id
5431 AND f.flight_id = 101;
5432
5433 SELECT * FROM booking b
5434 JOIN booking_flight bf ON b.booking_id = bf.booking_id
5435 JOIN flights f ON f.flight_id = bf.flight_id
5436 WHERE f.flight_id = 'cbb';
5437
5438 COMMIT;
```
- Data Output:** Below the query editor, an "ERROR" message is displayed: "неший синтаксис для типа integer: "cbb"" (Incorrect syntax for type integer: "cbb").
- Messages:** An "INFO" message is also present: "ОШИБКА: неверный синтаксис для типа integer: "cbb"" (Syntax error: invalid input for type integer: "cbb").
- Scratch Pad:** A tab labeled "Scratch Pad" is visible at the top right.

The screenshot shows the pgAdmin 4 interface with the following details:

- Object Explorer:** On the left, under "Servers(1) > PostgreSQL 17 > Databases(6) > airport_2 > public", the "Tables(10)" node is selected.
- Query Editor:** The main window displays a transaction log with the following SQL code:

```
5418 ---  
5419 BEGIN;  
5420  
5421 SELECT * FROM booking b  
5422 JOIN booking_flight bf ON b.booking_id = bf.booking_id  
5423 JOIN flights f ON f.flight_id = bf.flight_id  
5424 WHERE f.flight_id = 101;  
5425  
5426 UPDATE booking b  
5427 SET price = b.price - 10  
5428 FROM booking_flight bf  
5429 JOIN flights f ON f.flight_id = bf.booking_id  
5430 WHERE b.booking_id = bf.booking_id  
5431 AND f.flight_id = 101;  
5432  
5433 SELECT * FROM booking b  
5434 JOIN booking_flight bf ON b.booking_id = bf.booking_id  
5435 JOIN flights f ON f.flight_id = bf.flight_id  
5436 WHERE f.flight_id = 'cbb';  
5437  
5438 COMMIT;  
5439  
5440 ROLLBACK;  
5441
```
- Data Output:** Below the editor, it says "ROLLBACK".
- Status Bar:** At the bottom right, it says "Query returned successfully in 69 msec. CRLF Ln 5440, Col 10".

4 task

File Object Tools Edit View Window Help

Object Explorer

- > MY DB
- > Servers(1)
 - > PostgreSQL 17
 - > Databases(6)
 - > airport_2
 - > Casts
 - > Catalogs
 - > Event Triggers
 - > Extensions
 - > Foreign Data Wrappers
 - > Languages
 - > Publications
 - > Schemas(1)
 - > public
 - > Aggregates
 - > Collations
 - > Domains
 - > FTS Configurations
 - > FTS Dictionaries
 - > FTS Parsers
 - > FTS Templates
 - > Foreign Tables
 - > Functions
 - > Materialized Views
 - > Operators
 - > Procedures
 - > Sequences
 - > Tables(10)
 - > airline
 - > Columns(6)
 - airline_id
 - airline_code
 - airline_name
 - airline_country
 - created_at
 - update_at
 - > Constraints
 - > Indexes

Query Query History

```

5956 --4
5957 BEGIN;
5958
5959 SELECT * FROM passengers
5960 WHERE passenger_id = 1
5961 FOR UPDATE;
5962
5963 UPDATE passengers
5964 SET country_of_citizenship = 'Sweden',
5965           country_of_residence = 'Singapore'
5966 WHERE passenger_id = 1;
5967
5968 SELECT * FROM passengers WHERE passenger_id = 1;
5969
5970 COMMIT;
5971
5972
5973 --5
  
```

Data Output Messages Notifications

	passenger_id	first_name	last_name	date_of_birth	gender	country_of_citizenship	country_of_residence	passport_number	created_at	update_at
1	1	Hilde	Irnis	2000-01-03	Female	Sweden	Singapore	382385347-3	2023-11-25	2024-03-07

Total rows: 1 Query complete 00:00:00.116 CRLF Ln 5972, Col 1

5 task

File Object Tools Edit View Window Help

Object Explorer

- > RLS Policies
- > Rules
- > Triggers
- > baggage_check
 - > Columns
 - > Constraints
 - > Indexes
 - > RLS Policies
 - > Rules
 - > Triggers
- > boarding_pass
 - > Columns
 - > Constraints
 - > Indexes
 - > RLS Policies
 - > Rules
 - > Triggers
- > booking
 - > Columns(8)
 - booking_id
 - passenger_id
 - booking_platform
 - created_at
 - update_at
 - status
 - price
 - ticket_discount
 - > Constraints
 - > Indexes
 - > RLS Policies
 - > Rules
 - > Triggers
- > booking_flight
 - > Columns(5)
 - booking_flight_id
 - booking_id
 - flight_id

Query Query History

```

5954 WHERE booking_id IN (SELECT bf.booking_id FROM booking_flight bf
5955 WHERE bf.flight_id = 10);
5956
5957 --5
5958 BEGIN;
5959 INSERT INTO passengers(passenger_id,first_name,last_name,date_of_birth,gender,country_of_citizenship,
5960 country_of_residence,passport_number,created_at,update_at)
5961 VALUES(203,'Stefan','Salvatore','1985-08-16','Male','Canada','USA','8546931559-0',NOW(),NOW())
5962 INSERT INTO booking(booking_id,passenger_id,booking_platform,created_at,update_at,status,price,t
5963 VALUES(601,203,'Hagene-Klein',NOW(),NOW(),'Male',4555.6,NULL);
5964 COMMIT;
5965
5966 SELECT *FROM passengers p
5967 JOIN booking b ON p.passenger_id = b.passenger_id
5968 WHERE p.passenger_id = 203
  
```

Data Output Messages Notifications

	passenger_id	first_name	last_name	date_of_birth	gender	country_of_citizenship	country_of_residence	passport_number	created_at	update_at
1	203	Stefan	Salvatore	1985-08-16	Male	Canada	USA	8546931559-0	2025-11-21	2025-11-21

Total rows: 1 Query complete 00:00:00.071 CRLF Ln 5970, Col 1

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Please click [here](#) for more information.

6 task

Object Explorer

```

5968 --6
5969 WHERE p.passenger_id = 203
5970
5971 BEGIN;
5972 UPDATE booking
5973 SET price = price + 100
5974 WHERE booking_id IN (SELECT bf.booking_id FROM booking_flight bf
5975 JOIN flights f ON bf.flight_id = f.flight_id
5976 WHERE f.flight_no != 'AU-NT');
5977 COMMIT;
5978
5979 SELECT f.flight_no, b.price FROM booking b
5980 JOIN booking_flight bf ON b.booking_id = bf.booking_id
5981 JOIN flights f ON f.flight_id = bf.flight_id
5982 WHERE f.flight_no != 'AU-NT'
5983
5984
5985

```

Data Output

flight_no	price
AU-NT	419.21
AU-NT	5737.88
AU-NT	5003.70
AU-NT	7880.01
AU-NT	221.11
AU-NT	8181.83
AU-NT	8111.77
AU-NT	4653.96
AU-NT	4810.02
AU-NT	6416.68
AU-NT	4841.95
AU-NT	4810.22

Total rows: 18 Query complete 00:00:00.104

You are currently running version 9.6 of pgAdmin 4, however the current version is 9.9.

Please click [here](#) for more information.

7 task

Object Explorer

```

5984 --7
5985
5986 BEGIN;
5987 UPDATE baggage
5988 SET weight_in_kg = 18
5989 WHERE baggage_id IN (SELECT b.booking_id FROM booking b
5990 JOIN passengers p ON b.passenger_id = p.passenger_id
5991 WHERE p.first_name = 'Zerc' AND p.last_name = 'Dusey');
5992 COMMIT;
5993
5994 SELECT p.first_name || ' ' || p.last_name AS full_name, bg.weight_in_kg
5995 FROM baggage bg
5996 JOIN booking b ON b.booking_id = bg.booking_id
5997 JOIN passengers p ON p.passenger_id = b.passenger_id
5998 WHERE p.first_name = 'Zerc' OR p.last_name = 'Dusey'
5999
6000
6001

```

Data Output

full_name	weight_in_kg
Zerk Dusey	41.21
Zerk Dusey	8.06
Zerk Dusey	22.14
Zerk Dusey	41.13
Zerk Dusey	9.95

Total rows: 5 Query complete 00:00:00.089

You are currently running version 9.6 of pgAdmin 4, however the current version is 9.9.

Please click [here](#) for more information.

8 task

The screenshot shows the pgAdmin 4 interface. On the left is the Object Explorer pane, which lists various database objects like Indexes, RLS Policies, Triggers, and tables such as baggage_check, boarding_pass, booking, and flight. The booking table is currently selected, showing its columns (booking_id, passenger_id, booking_platform, created_at, update_at, status, price, ticket_discount) and constraints.

The main window contains a query editor with the following SQL code:

```

join passengers p on p.passenger_id = b.passenger_id
where p.first_name = 'Zerc' and p.last_name = 'Dusey'

--8
BEGIN;
UPDATE booking
SET ticket_discount = 0.9
WHERE passenger_id = 35;
ROLLBACK;

--9
BEGIN;
SELECT 1 FROM flights WHERE flight_id = 20 FOR UPDATE;
UPDATE booking_flight
SET flight_id = 20
WHERE flight_id = 12;
ROLLBACK;

```

The query returns successfully with 84 msec. The status bar at the bottom indicates "Total rows: Query complete 00:00:00.084".

9 task

This screenshot shows the pgAdmin 4 interface with a different database schema. The Object Explorer pane shows a database named 'MY DB' with a single table 'airline'. The 'Tables' section under 'MY DB' shows 10 tables, with 'airline' being the selected one. The 'Columns' section for 'airline' lists columns: airline_id, airline_code, airline_name, airline_country, created_at, and update_at.

The main query editor window contains the following SQL code:

```

5449
5450
5451
5452 --9
5453 BEGIN;
5454 SELECT * FROM booking_flight WHERE flight_id = 20;
5455 UPDATE booking_flight SET flight_id = 20 WHERE flight_id = 12;
5456 COMMIT;
5457
5458 SELECT * FROM booking_flight WHERE flight_id = 20;
5459
5460
5461
5462
5463
5464
5465
5466
5467
5468
5469
5470
5471
5472

```

The status bar at the bottom indicates "Total rows: Query complete 00:00:00.066".