

firstprVersion control

Database Explorer

postgres@localhost [2]

updated_at timestamp

keys 2

indexes 2

checks 1

baggage

baggage_check

boarding_pass

lab7lab8lab9lab10 x bookingconsole_9console_6console_5

lab2.public

create or replace procedure insertNewFlight()

end;

\$\$;

call insertNewFlight(

flight_id 500,

sch_departure_time '2021-01-02 13:54:45',

sch_arrival_time '2020-06-05 14:53:33',

Services

Tx. + >

lab2.public> call insertNewFlight(

500,

'2021-01-02 13:54:45',

'2020-06-05 14:53:33',

25,

7,

'B6',

'B4',

15,

'2023-04-20 16:23:46',

'2022-07-22 12:14:42',

'2024-06-29 10:31:52',

'2022-06-14 13:14:30'

Database Consoles > postgres@localhost [2] > lab10

50:22 CRLF UTF-8 4 spaces

02:37 28.11.2024

Database Explorer

postgres@localhost [2]

- checks
- baggage
- baggage_check
- boarding_pass
- booking
 - columns
 - booking_id integer
 - flight_id integer
 - passenger_id integer
 - booking_platform varchar(50)
 - created_at timestamp
 - updated_at timestamp
 - status varchar(50)
 - ticket_price numeric(7,2)
 - ticket_discount integer

Services

begin

update booking set status = new_status where flight_id = flight_id_new;

end;

\$\$

[2024-11-28 02:57:08] completed in 5 ms

lab2.public> call updateFlight(70, 'Canceled')

[2024-11-28 02:57:08] completed in 14 ms

Database Consoles > postgres@localhost [2] > lab10

lab7 lab8 lab9 lab10 booking console_9 console_6 console_5

lab2.public

66

67 create or replace procedure updateFlight(

68 in flight_id_new int,

69 in new_status varchar

70)

71 language plpgsql

72 as \$\$

73 begin

74 update booking set status = new_status where flight_id = flight_id_new;

75 end;

76 \$\$;

77

78 call updateFlight(flight_id_new 70, new_status 'Canceled');

79

80 select * from flights where flight_id lab2.public.flights.flight_id

72.6 CRLF UTF-8 4 spaces 02:57 28.11.2024

Database Explorer

postgres@localhost [2]

- flights
 - columns 12
 - flight_id integer
 - sch_departure_time timestamp
 - sch_arrival_time timestamp
 - departing_airport_id integer
 - arriving_airport_id integer
 - departing_gate text
 - arriving_gate varchar(50)
 - airline_id integer
 - act_departure_time timestamp
 - act_arrival_time timestamp
 - created_at timestamp
 - updated_at timestamp
 - keys 2
 - foreign keys 3

lab7 lab8 lab9 lab10 flights booking console_9 console_6 console_5

lab2.public

109 create or replace procedure GetFlightAirport(
115 create temp table temp_flight_list as
120 FROM flights f
121 JOIN airport dep 1.n<->1 ON f.departing_airport_id = dep.airport_id
122 JOIN airport arr 1.n<->1 ON f.arriving_airport_id = arr.airport_id
123 WHERE f.departing_airport_id = departing_airport;
124 end;
125 \$\$;
126 call GetFlightAirport(departing_airport 5);
127 select * from temp_flight_list;
128
129 ✓ create or replace procedure averageDelay(
130 in arriving_airport int,
131 out avg_delay numeric
132)
133 language plpgsql
134 as \$\$
135 BEGIN
136

Outputtemp_flight_list
CALL averageDelay(17, avg_delay_result);
RAISE NOTICE 'Average Delay: %', avg_delay_result;
END;
\$\$
Average Delay: 449548.950000000000
[2024-11-28 10:27:08] completed in 5 ms

Database Consoles > postgres@localhost [2] > lab10

129.1 (478 chars, 20 line breaks) CRLF UTF-8 4 spaces

10:27 28.11.2024

Activate Windows
Go to Settings to activate Windows.

Database Explorer

postgres@localhost [2]

- keys 2
- foreign keys 3
- indexes 6
- passengers
 - columns 10
 - passenger_id integer
 - first_name varchar(50)
 - last_name varchar(50)
 - date_of_birth date
 - gender varchar(50)
 - country_of_citizenship varchar
 - country_of_residence varchar
 - passport_number varchar(20)
 - created_at timestamp
 - updated_at timestamp

lab7 lab8 lab9 lab10 flights booking console_9 console_6 console_5

lab2.public

END;
\$\$;
--5
create or replace procedure passengersflight(
in flight_id_t int
)
language plpgsql
as \$\$
begin
create temp table temp_pass as
SELECT p.passenger_id, p.first_name, p.last_name
FROM passengers p
JOIN booking b 1<->1..n ON p.passenger_id = b.passenger_id
JOIN flights f ON b.flight_id = f.flight_id
WHERE f.flight_id = flight_id_t;
end;
\$\$;
call passengersflight(flight_id_t 0);
PRINT <= FROM temp_pass;

Services

Output temp_pass

1 row

passenger_id first_name last_name

11 Yolanda Wilson

Database Consoles > postgres@localhost [2] > lab10

153:2 CRLF UTF-8 4 spaces

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10:37
28.11.2024

Database Explorer

postgres@localhost [2]

- keys 2
- foreign keys 3
- indexes 6
- passengers
 - columns 10
 - passenger_id integer
 - first_name varchar(50)
 - last_name varchar(50)
 - date_of_birth date
 - gender varchar(50)
 - country_of_citizenship varchar
 - country_of_residence varchar
 - passport_number varchar(20)
 - created_at timestamp
 - updated_at timestamp

lab7 lab8 lab9 lab10 Database Explorer Alt+1 looking console_9 console_6 console_5

lab2.public

170 create or replace procedure gretestflights()
181 INTO gre_pass_id, gre_pass_first_name, count_flights
182 FROM booking fp
183 JOIN passengers p [1.nc->1] ON fp.passenger_id = p.passenger_id
184 GROUP BY fp.passenger_id, p.first_name
185 ORDER BY flight_count DESC
186 LIMIT 1;
187 raise notice 'Most gretest lfights : id = %, Name = %, count = %', gre_pass_id, gre_pass_first_name, count_flights;
188 end;
189 \$\$;
190 call gretestflights();
191 select * from temp_greatest_pass;
192
193 --7
194
195

Services

Output temp_pass

console
cons end;
cons \$\$
console [2024-11-28 10:46:53] completed in 6 ms
console lab2.public> call gretestflights()
cons Most gretest lfights : id = 2, Name = Molly, count = 5
console [2024-11-28 10:46:53] completed in 10 ms
lab10

Database Consoles > postgres@localhost [2] > lab10

194:1 CRLF UTF-8 4 spaces

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10:47
28.11.2024

Database Explorer

postgres@localhost [2]

- keys 2
- foreign keys 3
- indexes 6
- passengers
 - columns 10
 - passenger_id integer
 - first_name varchar(50)
 - last_name varchar(50)
 - date_of_birth date
 - gender varchar(50)
 - country_of_citizenship varchar
 - country_of_residence varchar
 - passport_number varchar(20)
 - created_at timestamp
 - updated_at timestamp

Services

Output temp_24_hours

57 rows

flight_id	sch_arrival_time	act_arrival_time	delay_hours
1	2020-04-20 05:51:53.000000	2020-11-10 13:54:14.000000	4904.0391666666666667
2	2020-06-05 14:53:33.000000	2022-07-22 12:14:42.000000	18645.3525
3	2020-07-26 01:02:31.000000	2022-12-15 12:59:46.000000	20939.954166666667
4	2022-02-22 19:39:21.000000	2023-10-04 14:59:52.000000	14131.341944444444
...

Database Consoles > postgres@localhost [2] > lab10

lab7 lab8 lab9 lab10 flights booking console_9 console_6 console_5

lab2.public

193 --7

194 create or replace procedure flights24hours()

195 language plpgsql

196 as \$\$

197 begin

198 create temp table temp_24_hours as

199 SELECT f.flight_id, f.sch_arrival_time, f.act_arrival_time,

200 EXTRACT(EPOCH FROM (f.act_arrival_time - f.sch_arrival_time)) / 3600 AS delay_hours

201 FROM flights f

202 WHERE f.act_arrival_time IS NOT NULL

203 AND f.sch_arrival_time IS NOT NULL

204 AND EXTRACT(EPOCH FROM (f.act_arrival_time - f.sch_arrival_time)) / 3600 > 24;

205 end;

206 \$\$;

207

208 call flights24hours();

209 select * from temp_24_hours;

210

194:1 (573 chars, 15 line breaks) CRLF UTF-8 4 spaces

10:53 28.11.2024

Database Explorer

postgres@localhost [2]

- information_schema
- pg_catalog
- public
 - tables 10
 - airline
 - columns 6
 - airline_id integer
 - airline_code varchar(30)
 - airline_name varchar(50)
 - airline_country varchar(50)
 - created_at timestamp
 - updated_at timestamp
 - keys 2
 - indexes 2
 - airport
 - columns 7

lab7 lab8 lab9 lab10 flights booking console_9 console_6 console_5

lab2.public

```
212 create or replace procedure flightscount()
213 language plpgsql
214 as $$
215 begin
216     create temp table temp_flights_count as
217     select a.airline_id, a.airline_name, count(f.flight_id) as flighth_count
218     from airline a
219     join flights f on a.airline_id = f.airline_id
220     group by a.airline_id, a.airline_name;
221 end;
222 $$;
223 call flightscount();
224 select * from temp_flights_count;
```

Services

Output temp_flights_count

54 rows

	airline_id	airline_name	flighth_count
8	10	Khan, Gamble and Peterson	1
9	90	Ortiz and Sons	1
10	35	Hall-Davidson	2
11	6	Harris, Young and Lopez	1

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Database Consoles

postgres@localhost [2] lab10

224:34 CRLF UTF-8 4 spaces

11:03 28.11.2024

Database Explorer

postgres@localhost [2]

- baggage
- baggage_check
- boarding_pass
- booking
 - columns
 - booking_id integer
 - flight_id integer
 - passenger_id integer
 - booking_platform varchar(50)
 - created_at timestamp
 - updated_at timestamp
 - status varchar(50)
 - ticket_price numeric(7,2)
 - ticket_discount integer
 - keys 2
 - foreign keys 1

Services

Output

temp_flights_count

```
end;
$$
[2024-11-28 11:14:01] completed in 6 ms
lab2.public> call aveTicketPrice(10)
average price for a ticket in flight is 215
[2024-11-28 11:14:01] completed in 3 ms
```

Database Consoles > postgres@localhost [2] > lab10

238:81 CRLF UTF-8 4 spaces

11:14 28.11.2024

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```
224 select * from temp_flights_count;
225 --9
226 ✓ create or replace procedure aveTicketPrice(
227     flight_id_r int
228 )
229     language plpgsql
230     as $$
231     declare
232         count_price int;
233     begin
234         select avg(ticket_price) as avg_ticket_price
235         into count_price
236         from booking b
237         where b.flight_id = flight_id_r;
238         raise notice 'average price for a ticket in flight is %' , count_price;
239     end;
240     $$;
241 ✓ call aveTicketPrice( flight_id_r 10);
242
```

Database Explorer

postgres@localhost [2]

baggage

baggage_check

boarding_pass

booking

columns

booking_id integer

flight_id integer

passenger_id integer

booking_platform varchar(50)

created_at timestamp

updated_at timestamp

status varchar(50)

ticket_price numeric(7,2)

ticket_discount integer

keys 2

foreign keys 1

lab7lab8lab9lab10flightsbookingconsole_9console_6console_5

lab2.public

226 create or replace procedure aveTicketPrice()
239 end;
240 \$\$;
241 call aveTicketPrice(flight_id 10);
242 -- \$1.0
243 ✓ create or replace procedure highestTicketPrice()
244 language plpgsql
245 as \$\$
246 declare
247 flight_number int;
248 dep_airport varchar;
249 arr_airport varchar;
250 highest_val int;
251 begin
252 select f.flight_id,
253 dep.airport_name AS departing_airport_name,
254 arr.airport_name AS arriving_airport_name,
255 max(b.ticket_price) as highest_ticket_price
256 from flights f join bookings b on f.flight_id = b.flight_id

Services

Outputtemp_flights_count

console
cons
lab2.public> call highestTicketPrice()
the flight number 47, the departure name = Pamelaport Airport and arrival airport name West Johnchester Airport, and the ticket price for the most expensive flight = 264
console
lab10

Database Consoles > postgres@localhost [2] > lab10243.1 (887 chars, 22 line breaks)CRLFUTF-84 spaces11:3328.11.2024