

# TASK 1

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

- Materialized Views
- Operators
- Procedures
- 1.3 Sequences
- Tables (10)
  - airline
  - airport
  - baggage
  - baggage\_check
  - boarding\_pass
  - booking
  - booking\_flight
  - flights
  - Columns (12)
    - flight\_id
    - sch\_departure\_time
    - sch\_arrival\_time
    - departing\_airport\_id
    - arriving\_airport\_id
    - departing\_gate
    - arriving\_gate
    - airline\_id
    - act\_departure\_time
    - act\_arrival\_time
    - created\_at
    - updated\_at
  - Constraints
  - Indexes
  - RLS Policies
  - Rules

public.baggage/Airport/postgres@PostgreSQL 17\*

public.baggage/Airport/postgres@PostgreSQL 17

No limit

Query Query History

```
1 SELECT a.airline_name, f.flight_id
2 FROM airline a
3 INNER JOIN flights f
4 ON f.airline_id = a.airline_id
5 WHERE airline_name = 'KazAir_130'
```

Scratch Pad

Data Output Messages Notifications

Showing rows: 1 to 2 Page No: 1 of 1

	airline_name character varying (50)	flight_id integer
1	KazAir_130	93
2	KazAir_130	165

Total rows: 2 Query complete 00:00:00.062

CRLF Ln 1, Col 35



Поиск



ENG

17:12

31.10.2025

# TASK 2

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

- Tables (10)
  - airline
  - airport
    - Columns (7)
      - airport\_id
      - airport\_name
      - country
      - state
      - city
      - created\_at
      - updated\_at
    - Constraints
    - Indexes
    - RLS Policies
    - Rules
    - Triggers
  - baggage
  - baggage\_check
  - boarding\_pass
  - booking
  - booking\_flight
  - flights
    - Columns (12)
      - flight\_id
      - sch\_departure\_time
      - sch\_arrival\_time
      - departing\_airport\_id
      - arriving\_airport\_id
      - departing\_gate
      - arriving\_gate

public.baggage/Airport/postgres@PostgreSQL 17\* x

public.baggage/Airport/postgres@PostgreSQL 17

No limit

Query Query History

```
1 SELECT a.airport_name AS Departing_airport_name, f.flight_id
2 FROM airport a
3 INNER JOIN
4 flights f
5 ON f.departing_airport_id = a.airport_id
```

Scratch Pad x

Data Output Messages Notifications

Showing rows: 1 to 200 Page No: 1 of 1

	departing_airport_name character varying (50)	flight_id integer
1	CentralGate Airfield 3	6
2	GoldenSteppe Air 2	11
3	NomadSky Airport 3 #2	12
4	KazAir Regional Airport 1	13
5	SkyNomad Port 5	14
6	CentralGate Airfield 3	15
7	Tengri Air Base 1	16

Total rows: 200 Query complete 00:00:00.073 CRLF Ln 5, Col 41

17:16 31.10.2025

# TASK 3

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

- updated\_at
- > Constraints
- > Indexes
- > RLS Policies
- > Rules
- > Triggers
- airport
- baggage
- baggage\_check
- boarding\_pass
- booking
- booking\_flight
- flights
  - Columns (12)
    - flight\_id
    - sch\_departure\_time
    - sch\_arrival\_time
    - departing\_airport\_id
    - arriving\_airport\_id
    - departing\_gate
    - arriving\_gate
    - airline\_id
    - act\_departure\_time
    - act\_arrival\_time
    - created\_at
    - updated\_at
  - > Constraints
  - > Indexes
  - > RLS Policies
  - > Rules

public.baggage/Airport/postgres@PostgreSQL 17\* x public.flights/Airp... x

public.baggage/Airport/postgres@PostgreSQL 17

Query Query History

```
1 SELECT a.airline_name
2 FROM airline a
3 LEFT JOIN flights f
4   ON f.airline_id = a.airline_id
5   AND f.sch_departure_time BETWEEN '2025-11-01' AND '2025-11-30'
6 WHERE f.flight_id IS NULL;
7
```

Scratch Pad x

Data Output Messages Notifications

Showing rows: 1 to 196 Page No: 1 of 1

	airline_name character varying (50)
190	SkyOne_194
191	BlueWings_195
192	EuroFly_196
193	AsiaAir_197
194	SteppeWings_198
195	NomadAir_199
196	KazAir_200

Total rows: 196 Query complete 00:00:00.090 CRLF Ln 7, Col 1



Поиск



18:02  
31.10.2025

# TASK 4

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

- Operators
- Procedures
- 1.3 Sequences
- Tables (10)
  - airline
  - airport
  - baggage
  - baggage\_check
  - boarding\_pass
  - booking
    - Columns (9)
      - booking\_id
      - flight\_id
      - passenger\_id
      - booking\_platform
      - created\_at
      - updated\_at
      - status
      - ticket\_price
      - ticket\_discount
  - Constraints
  - Indexes
  - RLS Policies
  - Rules
  - Triggers
  - booking\_flight
  - flights
    - Columns (12)
      - flight\_id
      - sch\_departure\_time

public.baggage/Airport/postgres@PostgreSQL 17\* x public.flights/Airp... x

public.baggage/Airport/postgres@PostgreSQL 17

Query Query History

```
1 SELECT p.last_name,  
2 p.first_name,  
3 f.flight_id  
4 FROM passengers p  
5 INNER JOIN booking b ON p.passenger_id = b.passenger_id  
6 INNER JOIN flights f ON b.flight_id = f.flight_id  
7 WHERE f.flight_id = 101
```

Scratch Pad x

Data Output Messages Notifications

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

	last_name character varying (50)	first_name character varying (50)	flight_id integer
1	Davis	Michael	101

Total rows: 1 Query complete 00:00:00.077

CRLF Ln 7, Col 24



Поиск



# TASK 5

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

- boarding\_pass
- booking
  - Columns (9)
    - booking\_id
    - flight\_id
    - passenger\_id
    - booking\_platform
    - created\_at
    - updated\_at
    - status
    - ticket\_price
    - ticket\_discount
  - Constraints
  - Indexes
  - RLS Policies
  - Rules
  - Triggers
- booking\_flight
- flights
  - Columns (12)
    - flight\_id
    - sch\_departure\_time
    - sch\_arrival\_time
    - departing\_airport\_id
    - arriving\_airport\_id
    - departing\_gate
    - arriving\_gate
    - airline\_id
    - act\_departure\_time
    - act\_arrival\_time

public.baggage/Airport/postgres@PostgreSQL 17\* x public.flights/Airp... x

public.baggage/Airport/postgres@PostgreSQL 17

No limit

Query Query History

```
1 SELECT
2     f.flight_id,
3     AVG(b.ticket_price),
4     SUM(b.ticket_price),
5     MAX(b.ticket_price),
6     MIN(b.ticket_price)
7 FROM booking b
8 INNER JOIN flights f ON b.flight_id = f.flight_id
9 GROUP BY f.flight_id
```

Scratch Pad

Data Output Messages Notifications

Showing rows: 1 to 128 Page No: 1 of 1

	flight_id [PK] integer	avg numeric	sum numeric	max numeric	min numeric
1	87	4229.6900000000000000	4229.69	4229.69	4229.69
2	184	603.2100000000000000	603.21	603.21	603.21
3	71	2065.1900000000000000	4130.38	2982.52	1147.86
4	68	2085.8150000000000000	4171.63	3942.29	229.34
5	51	2782.0300000000000000	2782.03	2782.03	2782.03
6	70	2685.2550000000000000	5370.51	4201.28	1169.23
7	80	2052.0000000000000000	2052.00	2052.00	2052.00

Total rows: 128 Query complete 00:00:00.106 CRLF Ln 9, Col 21

18:18 31.10.2025

# TASK 6

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

- Operators
- Procedures
- 1.3 Sequences
- Tables (10)
  - airline
    - Columns (6)
      - airline\_id
      - airline\_code
      - airline\_name
      - airline\_country
      - created\_at
      - updated\_at
    - Constraints
    - Indexes
    - RLS Policies
    - Rules
    - Triggers
  - airport
    - Columns (7)
      - airport\_id
      - airport\_name
      - country
      - state
      - city
      - created\_at
      - updated\_at
    - Constraints
    - Indexes
    - RLS Policies
    - Rules
    - Triggers

public.baggage/Airport/postgres@PostgreSQL 17\* x public.flights/Airp... x

public.baggage/Airport/postgres@PostgreSQL 17

Query Query History

```
1 SELECT a.country, f.flight_id, air.airline_name
2 FROM
3     airport a
4 INNER JOIN flights f ON f.arriving_airport_id = a.airport_id
5 INNER JOIN airline air ON air.airline_id = f.airline_id
6 WHERE a.country = 'France'
```

Scratch Pad x

Data Output Messages Notifications

Showing rows: 1 to 15 Page No: 1 of 1

	country character varying (50)	flight_id integer	airline_name character varying (50)
1	France	11	AsiaAir_177
2	France	21	SkyOne_74
3	France	33	SteppeWings_178
4	France	60	FlyHigh_2
5	France	84	EuroFly_106
6	France	101	EuroFly_126
7	France	107	FlyFly_153

Total rows: 15 Query complete 00:00:00.080 CRLF Ln 6, Col 20



Поиск



CRLF Ln 6, Col 20

18:40  
31.10.2025

# TASK 7

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

- ticket\_discount
- > Constraints
- > Indexes
- > RLS Policies
- > Rules
- > Triggers
- > booking\_flight
- > flights
  - > Columns (12)
    - flight\_id
    - sch\_departure\_tim
    - sch\_arrival\_time
    - departing\_airport\_
    - arriving\_airport\_id
    - departing\_gate
    - arriving\_gate
    - airline\_id
    - act\_departure\_tim
    - act\_arrival\_time
    - created\_at
    - updated\_at
- > Constraints
- > Indexes
- > RLS Policies
- > Rules
- > Triggers
- > passengers
  - > Columns (10)
    - passenger\_id
    - first\_name

public.baggage/Airport/postgres@PostgreSQL 17\* x public.flights/Airp... x

public.baggage/Airport/postgres@PostgreSQL 17

No limit

Query Query History

```
1 SELECT
2     a.country as arrival_destination,
3     p.last_name,
4     p.first_name,
5     EXTRACT(YEAR FROM AGE(CURRENT_DATE, p.date_of_birth)) AS age
6 FROM passengers p
7 INNER JOIN booking b ON p.passenger_id = b.passenger_id
8 INNER JOIN flights f ON f.flight_id = b.flight_id
9 INNER JOIN airport a ON f.arriving_airport_id = a.airport_id
10 WHERE EXTRACT(YEAR FROM AGE(CURRENT_DATE, p.date_of_birth)) < 18
11
```

Scratch Pad x

Data Output Messages Notifications

Showing rows: 1 to 17 Page No: 1 of 1

	arrival_destination character varying (50)	last_name character varying (50)	first_name character varying (50)	age numeric
1	Portugal	Williams	Michael	16
2	Portugal	Ivanov	Michael	17
3	USA	Petrov	Ivan	16
4	Turkey	Taylor	Sara	17
5	Brazil	Wilson	Olga	17
6	Portugal	Davis	Ivan	17
7	Portugal	Brown	Olga	15

Total rows: 17 Query complete 00:00:00.086 CRLF Ln 2, Col 23



Поиск



ENG

18:55

31.10.2025

# TASK 8

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

- ticket\_discount
- > Constraints
- > Indexes
- > RLS Policies
- > Rules
- > Triggers
- > booking\_flight
- ▼ flights
  - ▼ Columns (12)
    - flight\_id
    - sch\_departure\_time
    - sch\_arrival\_time
    - departing\_airport\_id
    - arriving\_airport\_id
    - departing\_gate
    - arriving\_gate
    - airline\_id
    - act\_departure\_time
    - act\_arrival\_time
    - created\_at
    - updated\_at
  - > Constraints
  - > Indexes
  - > RLS Policies
  - > Rules
  - > Triggers
  - ▼ passengers
    - ▼ Columns (10)
      - passenger\_id
      - first\_name

public.baggage/Airport/postgres@PostgreSQL 17\* x public.flights/Airp... x

public.baggage/Airport/postgres@PostgreSQL 17

No limit

Query Query History

```
1 SELECT
2     p.last_name || ' ' || p.last_name AS Full_Name,
3     p.passport_number,
4     f.act_arrival_time
5 FROM passengers p
6 INNER JOIN booking b ON p.passenger_id = b.passenger_id
7 INNER JOIN flights f ON f.flight_id = b.flight_id
8
```

Scratch Pad

Data Output Messages Notifications

Showing rows: 1 to 200 Page No: 1 of 1

	full_name text	passport_number character varying (20)	act_arrival_time timestamp without time zone
1	Ivanov Ivanov	P00193713	2021-09-23 04:03:49
2	Wilson Wilson	P00109254	2023-09-09 01:27:17
3	Wilson Wilson	P00125906	2022-01-19 07:13:06
4	Smith Smith	P00003595	2021-12-20 17:05:09
5	Wilson Wilson	P00181288	2024-03-26 05:54:41
6	Johnson Johns...	P00016488	2024-10-05 12:29:29
7	Ivanov Ivanov	P00095313	2021-06-17 06:51:08

Total rows: 200 Query complete 00:00:00.076

CRLF Ln 2, Col 18

18:59 31.10.2025



# TASK 9

pgAdmin 4

File Object Tools Edit View Window Help

Object Explorer

- 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
      - airport
        - Columns (7)
          - airport\_id
          - airport\_name
          - country
          - state
          - city
          - created\_at
          - updated\_at
        - Constraints
        - Indexes
        - RLS Policies

public.baggage/Airport/postgres@PostgreSQL 17\* x public.flights/Airp... x

public.baggage/Airport/postgres@PostgreSQL 17

Query Query History

```
1 SELECT
2     a.country,
3     COUNT(f.flight_id) AS number_of_flights
4 FROM flights f
5 INNER JOIN airline air ON f.airline_id = air.airline_id
6 INNER JOIN airport a ON f.departing_airport_id = a.airport_id
7 WHERE air.airline_country = a.country
8 GROUP BY a.country;
```

Data Output Messages Notifications

Showing rows: 1 to 8 Page No: 1 of 1

	country character varying (50)	count bigint
1	Turkey	1
2	Spain	1
3	Brazil	4
4	Kazakhstan	1
5	Poland	3
6	Portugal	4
7	France	1

Total rows: 8 Query complete 00:00:00.076 CRLF Ln 3, Col 41

19:09 31.10.2025