






























Database Explorer

- ▼  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

console_30 × passengers






Tx: Auto 

Playground 

 console_30 - console_30

lab2.public.passengers ✕

first_name

```
1 Ase1
```

2	Mira
---	------

3	Mira
---	------

4	Alikhan
---	---------

5	Ase1
---	------

6	Arman
---	-------

7	Timur
---	-------

8	Dana
---	------

9	Ilya
---	------

10	Ase1
----	------

11	Ase1
----	------

12	Ilya
----	------

13	Alikhan
----	---------

14	Alı Khan
----	----------

15	ALikhan
----	---------

16	Sanzhar
----	---------

17	ALIKhan
----	---------

203 rows ▾

Services

> fank_emp


🐘 console_30 507 ms

passengers 2 s 884 m

```
from passengers
```

[2025-10-13 19:03:24] 203 rows retrieved starting from 1 in 463 ms (execution: 15 ms, fetching: 448 ms)

Database Consoles > fank_emp > console_30

9:1 CRLF UTF-8 4 spaces 

Database Explorer

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DDL

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▼ 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

▼ postares 1 of 3

console_30

console_31

passengers

▶

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Tx: Auto

Playground

1

--Task2

2

3

ALTER TABLE booking

4

ADD CONSTRAINT chk_booking_price_range

5

CHECK (ticket_price >= 0 AND ticket_price <= 50000);

6

7

select booking_id, ticket_price

8

from booking

lab2.public.booking

booking_id

ticket_price

1

1

11501.15

2

2

11502.30

3

3

11503.45

4

4

11504.60

5

5

11505.75

6

6

11506.90

7

7

11508.05

8

8

11509.20

9

9

11510.35

10

10

11511.50

11

11

11512.65

12

12

11513.80

13

13

11514.95

14

14

11516.10

15

15

11517.25

16

16

8.40

200 rows

ADD CONSTRAINT chk_booking_price_range

CHECK (ticket_price >= 0 AND ticket_price <= 50000)

[2025-10-13 19:14:37] completed in 16 ms

[2025-10-13 19:15:15] lab2.public> select booking_id, ticket_price

from booking

[2025-10-13 19:15:15] 200 rows retrieved starting from 1 in 358 ms (execution: 6 ms, fetching: 352 ms)

Database Consoles

fank_emp

console_31

8:13

CRLF

UTF-8

4 spaces

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🔍 Поиск

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19:15

13.10.2025

Database Explorer

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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

console_30

console_31

console_32

baggage

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Tx: Auto

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Playground

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1

--task 3

2

3

ALTER TABLE baggage

4

ADD CONSTRAINT chk_baggage_weight_1_23

5

CHECK (weight_in_kg >= 1 AND weight_in_kg <= 23);

6

7

✓

select baggage_id, weight_in_kg

8

from baggage

9

console_32 - console_32

lab2.public.baggage

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Tx: Auto

DDL

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CSV

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	baggage_id	weight_in_kg
1	1	11.00
2	2	12.00
3	3	13.00
4	4	14.00
5	5	15.00
6	6	16.00
7	7	17.00
8	8	18.00
9	9	19.00
10	10	20.00
11	11	21.00
12	12	22.00
13	13	23.00
14	20	.00
15	21	11.00

Services

Tx

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Database

▼

fank_emp

console_31

443 ms

console_32

507 ms

[2025-10-13 19:35:34] completed in 12 ms

[2025-10-13 19:35:36] lab2.public> select baggage_id, weight_in_kg

from baggage

[2025-10-13 19:35:36] 200 rows retrieved starting from 1 in 431 ms (execution: 13 ms, fetching: 418 ms)

Database Consoles

➤

fank_emp

➤

console_32

9:1

CRLF

UTF-8

4 spaces

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Поиск

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19:35

13.10.2025

LW laboratory_work2

Version control

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Database Explorer

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DDL

▼ fank_emp 2

▼ lab2 3

▼ information_schema

▼ pg_catalog

▼ public

▼ tables 11

▼ airline

▼ airport

▼ baggage

▼ baggage_check

▼ boarding_pass

▼ booking

▼ booking_flight

▼ flights

▼ columns 12

▼ keys 1

▼ foreign keys

console_30

console_31

console_32

console_33

flights

airport

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Tx: Auto

Playground

console_33 - console_33

lab2.public.airport

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Tx: Auto

DDL

>

>

airport_name

1	Airport 10
2	Airport 11
3	Airport 12
4	Airport 13
5	Airport 14
6	Airport 15
7	Airport 16
8	Airport 17
9	Airport 18
10	Airport 19
11	Airport 20
12	Airport 21
13	Airport 22

191 rows

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

DELETE FROM flights

WHERE departing_airport_id IN (

SELECT airport.airport_id

FROM airport

WHERE char_length(airport_name) < 10

);

DELETE FROM airport

WHERE char_length(airport_name) < 10;

ALTER TABLE airport

ADD CONSTRAINT chk_airport_name_len10

CHECK (char_length(airport_name) >= 10);

select airport_name

from airport;

Services

Tx

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console_31 443 ms

flights 566 ms

console_30 507 ms

airport 472 ms

console_33 425 ms

console_32 479 ms

[2025-10-13 20:17:38] lab2.public> select airport_name

from airport

where char_length(airport_name) < 10

[2025-10-13 20:17:39] 0 rows retrieved in 381 ms (execution: 12 ms, fetching: 369 ms)

[2025-10-13 20:17:47] lab2.public> select airport_name

from airport

[2025-10-13 20:17:47] 191 rows retrieved starting from 1 in 372 ms (execution: 10 ms, fetching: 362 ms)

Database Consoles

>

fank_emp

>

console_33

31:1 (33 chars, 1 line break)

CRLF

UTF-8

4 spaces

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🔍 Поиск

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







20:27

13.10.2025

Database Explorer

🔊 console_30 🔊 console_31 🔊 console_32 🔊 console_33 🔊 console_34 × 🗄️ airline 🗄️ flights 🗄️ airport

DDL






 Tx: Auto 

 Playground 

lab2.public ▾

- ▼ fank_emp 2
 - ▼ lab2 3
 - ▼ information_schema
 - pg_catalog
 - public
 - ▼ tables 11
 - airline
 - airport
 - baggage
 - baggage_check
 - boarding_pass
 - booking
 - booking_flight
 - ▼ flights
 - ▼ columns 12
 - ▼ keys 2
 - ▼ foreign key
 - ▼ indexes 2
 - passanger_me
 - passengers
 - security_check
 - Database Objects
 - postgres 1 of 3
 - Server Objects

Services

Database Consoles > fank_emp > console_34

26:1 CRLF UTF-8 4 spaces

Database Explorer

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📄

📄

DDL

➤

fank_emp

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

console_30 console_31 console_32 console_33 console_34 console_35 x console_36 console_37 passengers

▶ ⌚ Ⓢ ⚙️ 📄 Tx: Auto ▾ Playground ▾

lab2.public ▾

1 --task6

2

3 ALTER TABLE passengers

4 ADD CONSTRAINT chk_passengers_age_by_gender

5 CHECK (

6 (LOWER(gender) = 'male' AND date_of_birth <= CURRENT_DATE - INTERVAL '18 years')

7 OR

8 (LOWER(gender) = 'female' AND date_of_birth <= CURRENT_DATE - INTERVAL '19 years')

9) NOT VALID;

10

11

12 ! ALTER TABLE passengers VALIDATE CONSTRAINT chk_passengers_age_by_gender;

13

14

15

16

17

18

[23514] ОШИБКА: ограничение-проверку "chk_passengers_age_by_gender" отношения "passengers" нарушает некоторая строка

Services

Tx + 👁 📄 ↕ ✕

Database

fank_emp

console_37

Output lab2.public.passengers

)

[2025-10-15 01:36:03] [42710] ОШИБКА: ограничение "chk_passengers_age_by_gender" для отношения "passengers" уже существует

[2025-10-15 01:36:11] lab2.public> ALTER TABLE passengers VALIDATE CONSTRAINT chk_passengers_age_by_gender

Database Consoles > fank_emp > console_35

10:1 CRLF UTF-8 4 spaces

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01:39 15.10.2025

Database Explorer

fank_emp

lab2

information_schema

pg_catalog

public

tables

airline

airport

baggage

baggage_check

boarding_pass

booking

booking_flight

console_30

console_31

console_32

console_33

console_34

console_35

console_36

passengers

airline

flight

DDL

Playground

lab2.public

--task7

ALTER TABLE passengers

ADD CONSTRAINT chk_passengers_age_by_citizenship

CHECK (

(LOWER(country_of_citizenship) = 'kazakhstan' AND date_of_birth <= CURRENT_DATE - INTERVAL '18 years')

OR (LOWER(country_of_citizenship) = 'france' AND date_of_birth <= CURRENT_DATE - INTERVAL '17 years')

OR (LOWER(country_of_citizenship) NOT IN ('kazakhstan', 'france') AND date_of_birth <= CURRENT_DATE - INTERVAL '19 years')

) NOT VALID;

ALTER TABLE passengers VALIDATE CONSTRAINT chk_passengers_age_by_citizenship;

select passenger_id

from passengers;

Services

Database

fank_emp

passengers 611 ms

console_30

console_36 386 ms

console_33

airline 765 ms

console_32

console_35 18 ms

airport

console_31

flight

Output

lab2.public.passengers

passenger_id

1

2

3

4

5

6

7

8

203 rows

Database Consoles

fank_emp

console_36

14:17

CRLF

UTF-8

4 spaces

01:38

15.10.2025

LWlaboratory_work2 ▾Version control ▾

Database Explorer

fank_emp

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

console_30console_31console_32console_33console_34console_35console_36console_37 ×booking

▶🔍↶CcW.*0 results↑↓🔼⋮

--task8

ALTER TABLE booking

ADD COLUMN ticket_discount NUMERIC(7,2) NOT NULL DEFAULT 0;

UPDATE booking

SET ticket_discount = ROUND(ticket_price * CASE WHEN created_at >= '2024-01-01' THEN 0.05 ELSE 0.10 END, 2);

ALTER TABLE booking

ADD CONSTRAINT chk_booking_ticket_discount

CHECK (

ticket_discount = ROUND(ticket_price * CASE WHEN created_at >= '2024-01-01' THEN 0.05 ELSE 0.10 END, 2)

) NOT VALID;

ALTER TABLE booking VALIDATE CONSTRAINT chk_booking_ticket_discount;

select ticket_discount

from booking;

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17 ✓

18

19

Services

Tx +🔍📄⏮⏭

Outputlab2.public.booking ×

booking 483 ms

console_37 399 ms

console_30

console_36 386 ms

console_33

console_32

📄📊🔄🕒⏏+−↶↷↑Tx: Auto ▾DDL🔍🔗🔗

CSV ▾📄📶🔊🔇🔊🔇

ticket_discount 🔼⚙

1575.35

2575.40

3575.46

200 rows ▾⋮

Database Consoles > fank_emp > console_37

19:1CRLFUTF-84 spaces🔗🔔

01:4215.10.2025