

DBeaver 25.2.4 - <postgres> ЧерняеваEA_дз3.sql

Database Navigator | Projects

Filter connections by name

- > DBeaver Sample Database (SQLite)
- > postgres localhost:5432
 - > Databases
 - > postgres
 - > Schemas
 - > public
 - > Tables
 - customer 752K
 - order_items 1.6M
 - orders 1.5M
 - product 48K
 - product_cor 24K
 - > Foreign Tables
 - > Views
 - > Materialized Views
 - > Indexes
 - > Functions
 - > Sequences
 - > Data types
 - > Aggregate functions
 - > Event Triggers

Files - General | DataSource

- > Bookmarks
- > Dashboards
- > Diagrams
- > Scripts

SQL | Commit | Rollback | Auto

postgres public@postgres

<postgres> Script.sql | <postgres> ЧерняеваEA_script.sql | <postgres> ЧерняеваEA_дз3.sql

```
select *
, row_number() over(partition by product_id order by list_price desc) as rn
from product
where rn = 1
```

— 1. Вывести распределение (количество) клиентов по сферам деятельности, отсортировав результат по убыв

```
select job_industry_category, count(*) as customer_count
from customer
group by job_industry_category
order by customer_count desc;
```

— 2. Найти общую сумму дохода (list_price*quantity) по всем подтвержденным заказам за каждый месяц по с

```
select
date_trunc('month', o.order_date) as month,
c.job_industry_category,
```

customer 1

select job_industry_category, Enter a SQL expression to filter results (use Ctrl+Space)

	AZ job_industry_category	123 customer_count
1	Manufacturing	799
2	Financial Services	774
3	n/a	656
4	Health	602
5	Retail	358
6	Property	267
7	IT	223
8	Entertainment	136
9	Argiculture	113
10	Telecommunications	72

Refresh | Save | Cancel | Export data | 200 | 10

10 row(s) fetched - 0.0s (0.0s fetch), on 2025-11-30 at 23:01:27

Connections - General connections | MSK en

DBeaver 25.2.4 - <postgres> ЧернышеваEA_дз3.sql

Database Navigator | Projects

Filter connections by name

- > DBeaver Sample Database (SQLite)
- > postgres localhost:5432
 - > Databases
 - > postgres
 - > Schemas
 - > public
 - > Tables
 - > customer 752K
 - > order_items 1.6M
 - > orders 1.5M
 - > product 48K
 - > product_cor 24K
 - > Foreign Tables
 - > Views
 - > Materialized Views
 - > Indexes
 - > Functions
 - > Sequences
 - > Data types
 - > Aggregate functions
 - > Event Triggers

Files - General | DataSource

- > Bookmarks
- > Dashboards
- > Diagrams
- > Scripts

SQL Editor: <postgres> Script.sql | <postgres> ЧернышеваEA_script.sql | <postgres> ЧернышеваEA_дз3.sql

```
group by job_industry_category
order by customer_count desc;
```

— 2. Найти общую сумму дохода (list_price*quantity) по всем подтвержденным заказам за каждый месяц по с

```
select
    date_trunc('month', o.order_date) as month,
    c.job_industry_category,
    sum(o.item_list_price_at_sale * oi.quantity) as revenue
from orders o
join order_items oi on o.order_id = oi.order_id
join customer c on o.customer_id = c.customer_id
where o.order_status = 'Approved'
group by month, c.job_industry_category
order by month, c.job_industry_category;
```

— 3. Вывести количество уникальных онлайн-заказов для всех брендов в рамках подтвержденных заказов клие

customer 1 x

select date_trunc('month', o.o) Enter a SQL expression to filter results (use Ctrl+Space)

	month	AZ job_industry_category	123 revenue
1	2017-01-01 00:00:00.000 +0300	Agriculture	232,148.25
2	2017-01-01 00:00:00.000 +0300	Entertainment	342,541.17
3	2017-01-01 00:00:00.000 +0300	Financial Services	2,032,708.45
4	2017-01-01 00:00:00.000 +0300	Health	1,570,012.48
5	2017-01-01 00:00:00.000 +0300	IT	604,949.53
6	2017-01-01 00:00:00.000 +0300	Manufacturing	1,931,238.45
7	2017-01-01 00:00:00.000 +0300	Property	486,257.97
8	2017-01-01 00:00:00.000 +0300	Retail	981,112.86
9	2017-01-01 00:00:00.000 +0300	Telecommunications	164,558.49
10	2017-01-01 00:00:00.000 +0300	n/a	1,788,848.1
11	2017-02-01 00:00:00.000 +0300	Agriculture	328,571.75

Refresh | Save | Cancel | Export data | 200 | 120

120 row(s) fetched - 0.0s (0.0s fetch), on 2025-11-30 at 23:02:39

MSK en Writable Smart Insert 7...

DBeaver 25.2.4 - <postgres> ЧерняеваEA_дз3.sql

Database Navigator | Projects

Filter connections by name

- > DBeaver Sample Database (SQLite)
- > postgres localhost:5432
 - > Databases
 - > postgres
 - > Schemas
 - > public
 - > Tables
 - > customer 752K
 - > order_items 1.6M
 - > orders 1.5M
 - > product 48K
 - > product_cor 24K
 - > Foreign Tables
 - > Views
 - > Materialized Views
 - > Indexes
 - > Functions
 - > Sequences
 - > Data types
 - > Aggregate functions
 - > Event Triggers
- > Files - General
 - > Bookmarks
 - > Dashboards
 - > Diagrams
 - > Scripts

Name DataSource

<postgres> Script.sql | <postgres> ЧерняеваEA_script.sql | <postgres> ЧерняеваEA_дз3.sql

Auto

— 3. Вывести количество уникальных онлайн-заказов для всех брендов в рамках подтвержденных заказов клиент

```
select
    p.brand,
    count(distinct o.order_id) as online_orders
from product_cor p
left join order_items oi on p.product_id = oi.product_id
left join orders o on oi.order_id = o.order_id
left join customer c on o.customer_id = c.customer_id
where o.online_order = true
    and c.job_industry_category = 'IT'
    and o.order_status = 'Approved'
group by p.brand
order by online_orders desc;
```

— 4. Найти по всем клиентам: сумму всех заказов (общего дохода), максимум, минимум и количество заказов

product_cor 1 x

select p.brand, count(distinct | Enter a SQL expression to filter results (use Ctrl+Space)

	AZ brand	123 online_orders
1	OHM Cycles	113
2	Giant Bicycles	102
3	Solex	101
4	WeareA2B	87
5	Trek Bicycles	78
6	Norco Bicycles	59

Refresh | Save | Cancel | Export data | 200 | 6

6 row(s) fetched - 0.0s, on 2025-11-30 at 23:02:55

MSK en Writable Smart Insert 7...

DBeaver 25.2.4 - <postgres> ЧерняеваЕА_дз3.sql

Database Navigator x Projects

Filter connections by name

- > DBeaver Sample Database (SQLite)
- > postgres localhost:5432
 - > Databases
 - > postgres
 - > Schemas
 - > public
 - > Tables
 - > customer 752K
 - > order_items 1.6M
 - > orders 1.5M
 - > product 48K
 - > product_cor 24K
 - > Foreign Tables
 - > Views
 - > Materialized Views
 - > Indexes
 - > Functions
 - > Sequences
 - > Data types
 - > Aggregate functions
 - > Event Triggers

Files - General x

Name DataSource

- > Bookmarks
- > Dashboards
- > Diagrams
- > Scripts

<postgres> Script.sql <postgres> ЧерняеваЕА_script.sql <postgres> ЧерняеваЕА_дз3.sql x

— 4. Найти по всем клиентам: сумму всех заказов (общего дохода), максимум, минимум и количество заказов

— способ 1

```
select
c.customer_id,
c.first_name,
c.last_name,
sum(oi.item_list_price_at_sale * oi.quantity) as total,
max(oi.item_list_price_at_sale * oi.quantity) as max_order,
min(oi.item_list_price_at_sale * oi.quantity) as min_order,
count(o.order_id) as orders_count,
avg(oi.item_list_price_at_sale * oi.quantity) as avg_order
from customer c
left join orders o on c.customer_id = o.customer_id
left join order_items oi on o.order_id = oi.order_id
group by c.customer_id, c.first_name, c.last_name
order by total desc, orders_count desc;
```

— способ 2

```
select distinct
c.customer_id.
```

customer 1 x

select c.customer_id, c.first_n | Enter a SQL expression to filter results (use Ctrl+Space)

	123 customer_id	AZ first_name	AZ last_name	123 total	123 max_order	123 min_c
1	3,739	Gates	Nelthorpe	[NULL]	[NULL]	
2	3,985	Caryn	Padbury	[NULL]	[NULL]	
3	3,936	Rodd	Spare	[NULL]	[NULL]	
4	3,890	Mavra	Padell	[NULL]	[NULL]	
5	3,979	Kleon	Adam	[NULL]	[NULL]	
6	3,571	Othilia	Metcalf	[NULL]	[NULL]	
7	3,860	Sheila-kathryn	Conklin	[NULL]	[NULL]	
8	3,699	Lillian	Somerfield	[NULL]	[NULL]	
9	3,709	Lilly	Roubay	[NULL]	[NULL]	

Refresh Save Cancel Export data 200 200+

200 row(s) fetched - 0.0s (0.0s fetch), on 2025-11-30 at 23:03:19

MSK en Writable Smart Insert 9...]

DBeaver 25.2.4 - <postgres> ЧерняеваEA_дз3.sql

Database Navigator | Projects

Filter connections by name

- > DBeaver Sample Database (SQLite)
- > postgres localhost:5432
 - > Databases
 - > postgres
 - > Schemas
 - > public
 - > Tables
 - customer 752K
 - order_items 1.6M
 - orders 1.5M
 - product 48K
 - product_cor 24K
 - Foreign Tables
 - Views
 - Materialized Views
 - Indexes
 - Functions
 - Sequences
 - Data types
 - Aggregate functions
 - Event Triggers

Files - General | DataSource

- > Bookmarks
- > Dashboards
- > Diagrams
- > Scripts

SQL Editor

<postgres> Script.sql | <postgres> ЧерняеваEA_script.sql | <postgres> ЧерняеваEA_дз3.sql

Auto | postgres | public@postgres

group by c.customer_id, c.first_name, c.last_name
order by total desc, orders_count desc;

— способ 2

```
select distinct
  c.customer_id,
  c.first_name,
  c.last_name,
  sum(oi.item_list_price_at_sale * oi.quantity) over (partition by c.customer_id as total,
  max(oi.item_list_price_at_sale * oi.quantity) over (partition by c.customer_id as max_order,
  min(oi.item_list_price_at_sale * oi.quantity) over (partition by c.customer_id as min_order,
  count(o.order_id) over (partition by c.customer_id as orders_count,
  avg(oi.item_list_price_at_sale * oi.quantity) over (partition by c.customer_id as avg_order
from customer c
left join orders o on c.customer_id = o.customer_id
left join order_items oi on o.order_id = oi.order_id
order by total desc, orders_count desc;
```

— 5. Найти имена и фамилии клиентов с топ-3 минимальной и топ-3 максимальной суммой транзакций за весь

customer 1

select distinct c.customer_id, Enter a SQL expression to filter results (use Ctrl+Space)

	123 customer_id	AZ first_name	AZ last_name	123 total	123 max_order	123 min_c
1	852	Andie	Bonney	[NULL]	[NULL]	
2	869	Addia	Abels	[NULL]	[NULL]	
3	1,373	Shaylynn	Epsley	[NULL]	[NULL]	
4	2,074	Roslyn	Rawdall	[NULL]	[NULL]	
5	2,660	Hunt	Scollard	[NULL]	[NULL]	
6	3,229	Carrol	Gheorghie	[NULL]	[NULL]	
7	3,236	Edsel	Arguile	[NULL]	[NULL]	
8	3,501	Kayla	Alentyev	[NULL]	[NULL]	
9	3,502	Wilfrid	Cleaves	[NULL]	[NULL]	

Refresh | Save | Cancel | Export data | 200 | 200+

200 row(s) fetched - 0.1s, on 2025-11-30 at 23:03:29

MSK | en | Writable | Smart Insert | 1.. |

DBeaver 25.2.4 - <postgres> ЧерняеваEA_дз3.sql

Database Navigator x Projects

Filter connections by name

- > DBeaver Sample Database (SQLite)
- > postgres localhost:5432
 - > Databases
 - > postgres
 - > Schemas
 - > public
 - > Tables
 - > customer 752K
 - > order_items 1.6M
 - > orders 1.5M
 - > product 48K
 - > product_cor 24K
 - > Foreign Tables
 - > Views
 - > Materialized Views
 - > Indexes
 - > Functions
 - > Sequences
 - > Data types
 - > Aggregate functions
 - > Event Triggers

Files - General x

Name DataSource

- > Bookmarks
- > Dashboards
- > Diagrams
- > Scripts

SQL Commit Rollback

Auto

postgres public@postgres

<postgres> Script.sql <postgres> ЧерняеваEA_script.sql <postgres> ЧерняеваEA_дз3.sql x

5. Найти имена и фамилии клиентов с топ-3 минимальной и топ-3 максимальной суммой транзакций за весь

```
select
  c.first_name,
  c.last_name,
  coalesce(sum(oi.item_list_price_at_sale * oi.quantity), 0) as total
from customer c
left join orders o on c.customer_id = o.customer_id
left join order_items oi on o.order_id = oi.order_id
group by c.customer_id, c.first_name, c.last_name
order by total desc
limit 3
)
union all
(
  select
    c.first_name,
    c.last_name,
    coalesce(sum(oi.item_list_price_at_sale * oi.quantity), 0) as total
```

Results 1 x

(select c.first_name, c.last_name | Enter a SQL expression to filter results (use Ctrl+Space)

	AZ first_name	AZ last_name	123 total
1	Elisha	Venny	0
2	Rodd	Spare	0
3	Shaylynn	Epsley	0
4	Tye	Dooohan	129,789.94
5	Jeffry	Slowly	133,657.06
6	Jillie	Fyndon	136,632.46

Refresh Save Cancel Export data 200 6

6 row(s) fetched - 0.0s, on 2025-11-30 at 23:04:01

MSK en Writable Smart Insert 1..

DBEaver 25.2.4 - <postgres> ЧерняеваEA_дз3.sql

Database Navigator | Projects

Filter connections by name

- DBEaver Sample Database (SQLite)
- postgres localhost:5432
 - Databases
 - postgres
 - Schemas
 - public
 - Tables
 - customer 752K
 - order_items 1.6M
 - orders 1.5M
 - product 48K
 - product_cor 24K
 - Foreign Tables
 - Views
 - Materialized Views
 - Indexes
 - Functions
 - Sequences
 - Data types
 - Aggregate functions
 - Event Triggers

Files - General | DataSource

- Bookmarks
- Dashboards
- Diagrams
- Scripts

SQL Editor: <postgres> Script.sql | <postgres> ЧерняеваEA_script.sql | <postgres> ЧерняеваEA_дз3.sql

— 6. Вывести только вторые транзакции клиентов (если они есть) с помощью оконных функций. Если у клиент

```
select
  o.order_id,
  o.customer_id,
  c.first_name,
  c.last_name,
  o.order_date
from (
  select
    order_id,
    customer_id,
    order_date,
    row_number() over (partition by customer_id order by order_date) as num
  from orders
) o
join customer c on o.customer_id = c.customer_id
where o.num = 2;
```

— 7. Вывести имена, фамилии и профессии клиентов, а также длительность максимального интервала (в днях)

orders(+) 1 x

select o.order_id, o.customer_id | Enter a SQL expression to filter results (use Ctrl+Space)

	order_id	customer_id	first_name	last_name	order_date
1	13,424	1	Laraine	Medendorp	2017-02-21
2	6,743	2	Eli	Bockman	2017-06-11
3	15,188	3	Arlin	Dearle	2017-03-24
4	14,648	4	Talbot		2017-06-18
5	19,993	5	Sheila-kathryn	Calton	2017-04-28
6	8,204	6	Curr	Duckhouse	2017-02-06
7	18,549	7	Fina	Merali	2017-02-24
8	19,844	8	Rod	Inder	2017-01-28
9	2,979	9	Mala	Lind	2017-03-06

Refresh | Save | Cancel | Export data | 200 | 200+

200 row(s) fetched - 0.0s (0.0s fetch), on 2025-11-30 at 23:04:19

MSK | en | Writable | Smart Insert | 1.. |

DBeaver 25.2.4 - <postgres> ЧерняеваEA_дз3.sql

Database Navigator | Projects

Filter connections by name

- > DBeaver Sample Database (SQLite)
- > postgres localhost:5432
 - > Databases
 - > postgres
 - > Schemas
 - > public
 - > Tables
 - customer 752K
 - order_items 1.6M
 - orders 1.5M
 - product 48K
 - product_cor 24K
 - Foreign Tables
 - Views
 - Materialized Views
 - Indexes
 - Functions
 - Sequences
 - Data types
 - Aggregate functions
 - Event Triggers

Files - General | DataSource

- > Bookmarks
- > Dashboards
- > Diagrams
- > Scripts

SQL Editor

7. Вывести имена, фамилии и профессии клиентов, а также длительность максимального интервала (в днях)

```
select
  c.first_name,
  c.last_name,
  c.job_title,
  max(next_date - order_date) as max_interval
from (
  select
    customer_id,
    order_date,
    lead(order_date) over (partition by customer_id order by order_date) as next_date
  from orders
) o
join customer c on o.customer_id = c.customer_id
where next_date is not null
group by c.customer_id, c.first_name, c.last_name, c.job_title
order by max_interval desc;
```

8. Найти топ-5 клиентов (по общему доходу) в каждом сегменте благосостояния (wealth_segment). Вывести

customer 1

select c.first_name, c.last_name, c.job_title, 123 max_interval

	AZ first_name	AZ last_name	AZ job_title	123 max_interval
1	Susanetta		Legal Assistant	357
2	Gregorius	Cockram	Data Coordinator	330
3	Stoddard	Giacomoni	Structural Analysis Engineer	330
4	Royall	Terris	Geological Engineer	330
5	Bearnard	Letixier		329
6	Caralie	Sellors	Senior Editor	321
7	Debee	Martynov	Senior Editor	320
8	Genni	Larway	Environmental Specialist	314
9	Timmie	Lenden		310

Refresh | Save | Cancel | Export data | 200 | 200+

200 row(s) fetched - 0.0s, on 2025-11-30 at 23:04:30

MSK en Writable Smart Insert 1..

DBeaver 25.2.4 - <postgres> ЧерняеваEA_дз3.sql

Database Navigator | Projects

Filter connections by name

- > DBeaver Sample Database (SQLite)
- > postgres localhost:5432
 - > Databases
 - > postgres
 - > Schemas
 - > public
 - > Tables
 - > customer 752K
 - > order_items 1.6M
 - > orders 1.5M
 - > product 48K
 - > product_cor 24K
 - > Foreign Tables
 - > Views
 - > Materialized Views
 - > Indexes
 - > Functions
 - > Sequences
 - > Data types
 - > Aggregate functions
 - > Event Triggers

Files - General | DataSource

- > Bookmarks
- > Dashboards
- > Diagrams
- > Scripts

SQL Editor

<postgres> Script.sql | <postgres> ЧерняеваEA_script.sql | <postgres> ЧерняеваEA_дз3.sql X

group by c.customer_id, c.first_name, c.last_name, c.wealth_segment
order by max_interval desc;

— 8. Найти топ-5 клиентов (по общему доходу) в каждом сегменте благосостояния (wealth_segment). Вывести

```
select first_name, last_name, wealth_segment, total
from (
    select
        c.first_name,
        c.last_name,
        c.wealth_segment,
        coalesce(sum(oi.item_list_price_at_sale * oi.quantity), 0) as total,
        row_number() over (partition by c.wealth_segment order by coalesce(sum(oi.item_list_price_at_sale * oi.quantity), 0) desc) as rank
    from customer c
    left join orders o on c.customer_id = o.customer_id
    left join order_items oi on o.order_id = oi.order_id
    group by c.customer_id, c.first_name, c.last_name, c.wealth_segment
) t
where rank <= 5
order by wealth_segment, total desc;
```

customer 1 X

select first_name, last_name, | Enter a SQL expression to filter results (use Ctrl+Space)

	AZ first_name	AZ last_name	AZ wealth_segment	total
1	Jeffrey	Slowly	Affluent Customer	133,657.06
2	Tye	Doohan	Affluent Customer	129,789.94
3	Herc	McIlhone	Affluent Customer	107,476.68
4	Queenie	Flips	Affluent Customer	106,182.33
5	Jessamine	Brazear	Affluent Customer	98,618.77
6	Mercy	Wilsone	High Net Worth	109,334.74
7	Lockwood	Exroll	High Net Worth	92,405.18
8	Linell		High Net Worth	91,450.18
9	Gayelord	Lipman	High Net Worth	90,493.06

Refresh | Save | Cancel | Export data | 200 | 15

15 row(s) fetched - 0.0s, on 2025-11-30 at 23:04:40

MSK en Writable Smart Insert 2...