

DBeaver 25.2.4 - <postgres> ЧерняеваEA\_дз3.sql

Auto postgres public@postgres

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

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SQL Commit Rollback

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 убыванию количества клиентов.

```
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 сферам деятельности.

```
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)

Record	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> ЧерняеваEA\_дз3.sql

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Script.sql <postgres> ЧерняеваEA\_script.sql <postgres> ЧерняеваEA\_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(oi.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;
```

customer 1

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	Argiculture	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	Argiculture	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

Auto Commit Rollback public@postgres

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Script.sql <postgres> Script.sql <postgres> ЧерняеваEA\_script.sql <postgres> ЧерняеваEA\_дз3.sql

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

```
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

select p.brand, count(distinct

	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 Smart Insert 7... 200 6

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

DBeaver 25.2.4 - <postgres> ЧерняеваEA\_дз3.sql

Auto postgres public@postgres

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Script.sql <postgres> Script.sql <postgres> ЧерняеваEA\_script.sql <postgres> ЧерняеваEA\_дз3.sql

— 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

Grid

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

Text

Record

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

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<postgres> Script.sql <postgres> ЧерняеваEA\_script.sql <postgres> ЧерняеваEA\_дз3.sql

```
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

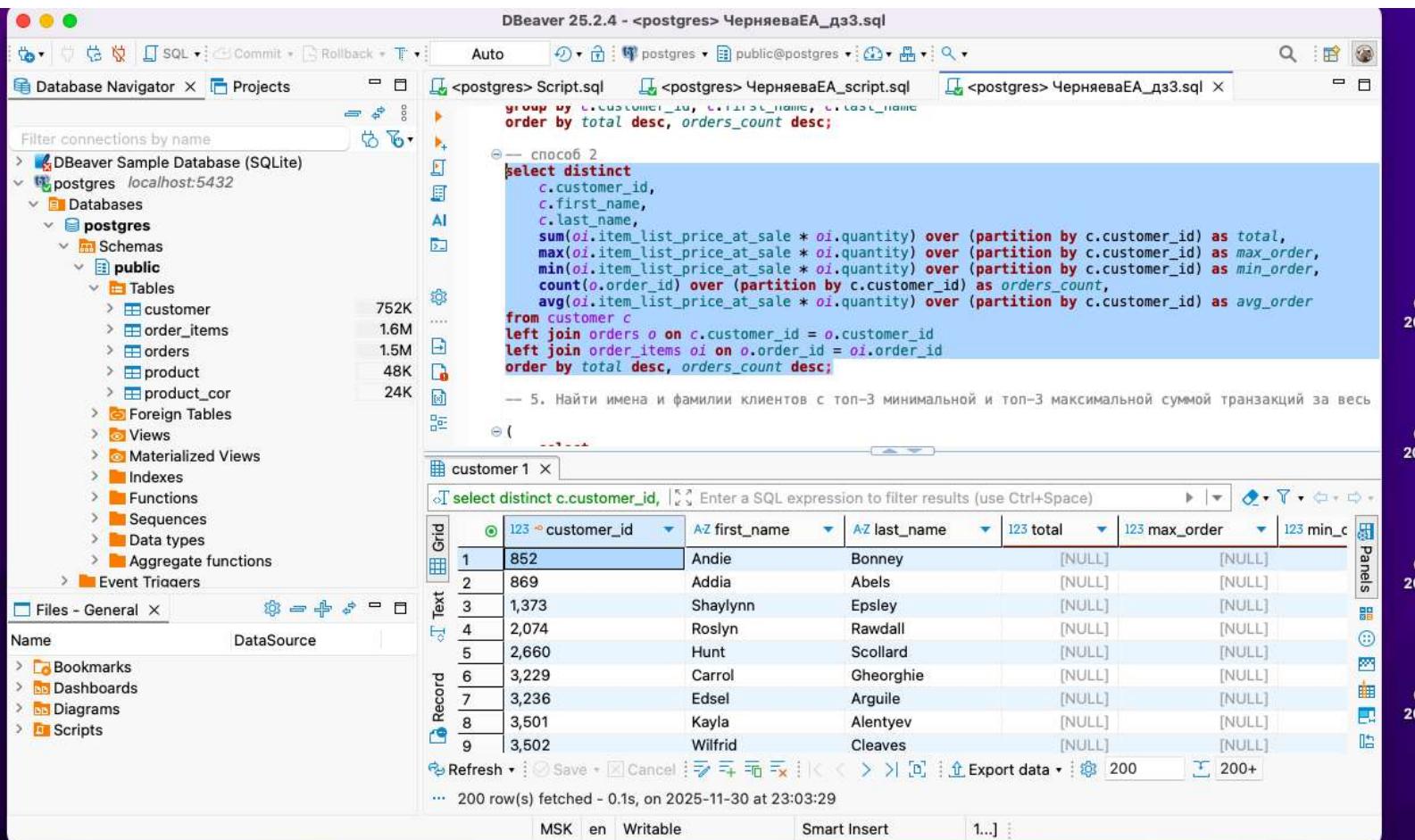
customer 1

select distinct c.customer\_id, first\_name, last\_name, total, max\_order, min\_order

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

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

Auto Commit Rollback postgres public@postgres

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> Tables

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> product\_cor 24K

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SQL Script <postgres> Script.sql <postgres> ЧерняеваEA\_script.sql <postgres> ЧерняеваEA\_дз3.sql

— 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
    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 asc
    limit 3
)
```

Results 1

( select c.first\_name, c.last\_name, coalesce(sum(oi.item\_list\_price\_at\_sale \* oi.quantity), 0) as total )

	AZ first_name	AZ last_name	123 total
1	Elisha	Venny	0
2	Rodd	Spare	0
3	Shaylynn	Epsley	0
4	Tye	Doohan	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

Auto Commit Rollback

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Script.sql <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 клиента

```
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

select o.order\_id, o.customer\_id, first\_name, last\_name, order\_date

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

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<postgres> Script.sql <postgres> ЧерняеваEA\_script.sql <postgres> ЧерняеваEA\_дз3.sql

— 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 | Enter a SQL expression to filter results (use Ctrl+Space)

	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..]

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Script.sql <postgres> Script.sql <postgres> ЧерняеваEA\_script.sql <postgres> ЧерняеваEA\_дз3.sql

— 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)
    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

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

	AZ first_name	AZ last_name	AZ wealth_segment	123 total
1	Jeffry	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	Wilsons	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...]