

```

-- Вывести все уникальные бренды, у которых есть хотя бы один продукт со стандартной стоимостью выше 1500 долларов, и суммарными продажами не менее 1000 единиц
select distinct p.brand
from product p
where p.standard_cost > 1500
and (
    select sum(oi.quantity)
    from product p2
    left join order_items oi on p2.product_id = oi.product_id
) > 1000;

```

product 1 ×

Select distinct p.brand from product p where p.standard_

	AZ brand
1	OHM Cycles
2	Trek Bicycles
3	Solex
4	Giant Bicycles

Value ×
Text ▾

OHM Cycles

```

-- Для каждого дня в диапазоне с 2017-04-01 по 2017-04-09 включительно вывести количество подтвержденных онлайн-заказов и количество уникальных клиентов, совершивших эти заказы
with dates as (
    select *
    from orders o
    where o.online_order = true and o.order_status = 'Approved'
    and o.order_date::date between '2017-04-01' and '2017-04-09'
)
select d.order_date::date, count(distinct d.order_id), count(distinct d.customer_id)
from dates d
left join customer c on c.customer_id = d.customer_id
group by d.order_date::date;

```

Results 1 ×

Select dates as (select * from orders o where o.online_order

	order_date	l23 count	l23 count
1	2017-04-01	37	37
2	2017-04-02	29	29
3	2017-04-03	27	27
4	2017-04-04	32	32
5	2017-04-05	33	32
6	2017-04-06	36	36
7	2017-04-07	24	24
8	2017-04-08	33	33
9	2017-04-09	30	30

Value ×
Text ▾

2017-04-01

```

-- Вывести профессии клиентов:
-- из сферы IT, чья профессия начинается с Senior;
-- из сферы Financial Services, чья профессия начинается с Lead.
-- Для обеих групп учитывать только клиентов старше 35 лет. Объединить выборки с помощью UNION ALL.

```

```

select customer_id, first_name, last_name, job_industry_category, job_title, c."DOB"
from customer c
where c.job_industry_category = 'IT'
    and c.job_title LIKE 'Senior%'
union all
select customer_id, first_name, last_name, job_industry_category, job_title, c."DOB"
from customer c
where c.job_industry_category = 'Financial Services'
    and c.job_title LIKE 'Lead%';

```

Results 1 ×

Select customer_id, first_name, last_name, job_industry_

	l23 customer_id	AZ first_name	AZ last_name	AZ job_industry_category	AZ job_title	AZ DOB
1	290	Giorgio	Kevane	IT	Senior Sales Associate	
2	685	Booth	Birkin	IT	Senior Developer	
3	1,418	Valaria	Hugh	IT	Senior Sales Associate	1976-11-29
4	2,039	Laureen	Blower	IT	Senior Developer	1978-03-26
5	3,151	Thorn	Choffin	IT	Senior Developer	
6	3,222	Caralie	Sellors	IT	Senior Editor	

290

```

-- Вывести бренды, которые были куплены клиентами из сферы Financial Services, но не были куплены клиентами из сферы IT.
with finServicesClient as(
    select *
    from customer c
    where c.job_industry_category = 'Financial Services'
),
orders_id as (
    select *
    from finServicesClient as fsc
    left join orders o on fsc.customer_id = o.customer_id
),
product_ids as(
    select oi.product_id, oids.job_industry_category
    from orders_id as oids
    left join order_items oi on oids.order_id = oi.order_id
)
select distinct p.brand, pids.job_industry_category
from product p
left join product_ids as pids on p.product_id = pids.product_id;

```

product(+) 1 ×

with finServicesClient as select * from customer c where c.job_industry_category = 'Financial Services' Enter a SQL expression to filter results (use Ctrl+Space)

	AZ brand	AZ job_industry_category	
1	Solex	Financial Services	
2	Norco Bicycles	Financial Services	
3	Trek Bicycles	Financial Services	
4	Giant Bicycles	Financial Services	
5	WeareA2B	Financial Services	
6	OHM Cycles	Financial Services	
7		Financial Services	

```

-- Вывести 10 клиентов (ID, имя, фамилия), которые совершили наибольшее количество онлайн-заказов (в штуках) брендов Giant Bicycles, Norco Bicycles, Trek Bicycles, при
with state_avg as (
    select c.state, avg(c.property_valuation) as avg_val
    from customer c
    where c.property_valuation is not null
    group by c.state
),
online_orders as (
    select c.customer_id, c.first_name, c.last_name, c.property_valuation, c.state, count(o.order_id) as online_count
    from customer c
    join orders o on c.customer_id = o.customer_id
    join order_items oi on o.order_id = oi.order_id
    join product p on oi.product_id = p.product_id
    where o.online_order = true
    and p.brand in ('Giant Bicycles', 'Norco Bicycles', 'Trek Bicycles')
    and c.property_valuation > (
        select avg_val
        from state_avg sa
        where sa.state = c.state
    )
    group by c.customer_id, c.first_name, c.last_name, c.property_valuation, c.state
)
select oo.customer_id, oo.first_name, oo.last_name, oo.online_count
from online_orders oo
order by oo.online_count desc
limit 10;

```

customer 1 ×

with state_avg as select c.state, avg(c.property_valuation) as avg_val from customer c where c.property_valuation is not null Enter a SQL expression to filter results (use Ctrl+Space)

	123 customer_id	AZ first_name	AZ last_name	123 online_count	
1	714	Burtie	Scintsbury	41	
2	1,480	Bird	Diess	40	
3	1,640	Erie	Worswick	34	
4	2,240	Niall	Hallifax	30	
5	1,817	Jozef	Frizzell	27	
6	3,326	Wes	Crotch	27	
7	3,375	Thorsten	Gregon	27	
8	2,358	Ave	Peatt	26	
9	3,251	Cammie	Edridge	26	
10	86	Job	Sleney	26	

```

-- Вывести всех клиентов (ID, имя, фамилия), у которых нет подтвержденных онлайн-заказов за последний год, но при этом они владеют автомобилем и их сегмент
with online_orders_on_last_year as (
    select distinct c.customer_id
    from customer c
        join orders o on c.customer_id = o.customer_id
    where o.online_order = true
        and o.order_status = 'Approved'
        and date_trunc('year', o.order_date::date) = '2017-12-31'
),
customers_on_last_year as (
    select
        c.customer_id,
        c.first_name,
        c.last_name
    from customer c
    where c.owns_car = 'Yes'
        and c.wealth_segment not in ('Mass Customer')
        and c.customer_id not in (
            select customer_id
            from online_orders_on_last_year
        )
)
select
    c_last.customer_id,
    c_last.first_name,
    c_last.last_name
from customers_on_last_year c_last;

```

customer 1 ×

with online_orders_on_last_year as (select distinct c.customer_id from customer c join orders o on c.customer_id = o.customer_id where o.online_order = true and o.order_status = 'Approved' and date_trunc('year', o.order_date::date) = '2017-12-31'), customers_on_last_year as (select c.customer_id, c.first_name, c.last_name from customer c where c.owns_car = 'Yes' and c.wealth_segment not in ('Mass Customer') and c.customer_id not in (select customer_id from online_orders_on_last_year)) select c_last.customer_id, c_last.first_name, c_last.last_name from customers_on_last_year c_last | Enter a SQL expression to filter results (use Ctrl+Space)

	customer_id	first_name	last_name
1	5	Sheila-kathryn	Calton
2	6	Curr	Duckhouse
3	7	Fina	Merali
4	9	Mala	Lind
5	13	Gabriele	Norcross
6	17	Heath	Faraday
7	21	Mile	Cammocke
8	23	Olav	Polak
9	28	Fee	Zellmer
10	30	Derrick	Helleckas
11	31	Star	Praton

```

-- Вывести всех клиентов из сферы 'IT' (ID, имя, фамилия), которые купили 2 из 5 продуктов с самой высокой list_price в продуктовой линейке Road.
with road_products as (
    select p.product_id, p.list_price
    from product p
    where product_line = 'Road'
),
customers_orders as (
    select distinct c.customer_id, c.first_name, c.last_name, oi.product_id
    from customer c
        join orders o on c.customer_id = o.customer_id
        join order_items oi on o.order_id = oi.order_id
    where c.job_industry_category = 'IT'
        and oi.product_id in (
            (
                select product_id from road_products
            )
        )
)
select co.customer_id, co.first_name, co.last_name
from customers_orders co
group by customer_id, first_name, last_name
having count(distinct co.product_id) >= 2 and count(distinct co.product_id) <= 5;

```

customer 1 ×

with road_products as (select p.product_id, p.list_price from | Enter a SQL expression to filter results (use Ctrl+Space)

Grid	customer_id	first_name	last_name
1	22	Deeanne	Durtnell
2	34	Jephthah	Bachmann
3	64	Gerek	Yve
4	83	Kerr	Simmell
5	144	Jory	Barrabeale
6	168	Reggie	Broggetti
7	240	Gavin	Fawks
8	249	D'arcy	Slay
9	255	Keeley	Kruger
10	290	Giorgio	Kevane
11	308	Iver	Dobsons
12	324	Franz	Lyptrit
13	412	Evanne	Feechum
14	429	Berny	Bold
15	441	Felicle	Beneze

```

-- -- Вывести клиентов (ID, имя, фамилия, сфера деятельности) из сфер IT или Health, которые совершили не менее 3 подтвержденных заказов в первом квартале 2017 года.
-- Разделить вывод на две группы (IT и Health) с помощью UNION.
with customer_orders as (
    select c.customer_id, c.first_name, c.last_name, c.job_industry_category,
           count(o.order_id) as count,
           sum(oi.quantity * oi.item_list_price_at_sale) as total
      from customer c
     join orders o on c.customer_id = o.customer_id
     join order_items oi on o.order_id = oi.order_id
     where c.job_industry_category in ('IT', 'Health')
       and o.order_status = 'Approved'
       and o.order_date between '2017-01-01' and '2017-03-01'
   group by c.customer_id, c.first_name, c.last_name, c.job_industry_category
   having
        count(o.order_id) >= 3
        and sum(oi.quantity * oi.item_list_price_at_sale) > 10000
)
select *
  from (
    select co.customer_id, co.first_name, co.last_name, co.job_industry_category
      from customer_orders co
     where job_industry_category = 'IT'
  union
    select co2.customer_id, co2.first_name, co2.last_name, co2.job_industry_category
      from customer_orders co2
     where job_industry_category = 'Health'
  ) as res
order by res.job_industry_category

```

Results 1 ×

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

	O	123 customer_id	AZ first_name	AZ last_name	AZ job_industry_category	
1		173	Ebba	Hanselmann	Health	
2		2,172	Emmery	Angrock	Health	
3		590	Ddene	Burleton	Health	
4		2,292	Christie	MacClure	Health	
5		2,353	Lyn	Luquet	Health	
6		2,788	Melantha	Pickburn	Health	
7		2,815	Emery	Carlett	Health	
8		607	Adelaida	Redmond	Health	
9		2,992	Crystal	Assur	Health	
10		3,166	Ronan	Plummer	Health	