

```
/*
問題1. 各ユーザーについて、最新の注文日とそのときに購入した商品の名前を取得せよ。
```

```
*/
select u.name as user_name, p.name as product_name, o.order_date
from orders o
join users u on o.user_id = u.id
join products p on o.product_id = p.id
where (o.user_id, o.order_date) in (select user_id, max(order_date)
from orders
GROUP BY user_id
);
```

```
/*
問題2. 全商品の中で、平均注文数量 (quantity) が全体平均より多い商品の名前と平均
数量を取得せよ。
```

```
*/
select p.name, AVG(o.quantity) as avg_quantity from orders o
join products p on o.product_id = p.id
group by p.id, p.name
having avg(o.quantity) > (
select avg(quantity) from orders
);
```

```
/*
問題3. 注文が2回以上あるユーザーのうち、同じ商品を複数回注文したことのあるユーザ
ー名と商品名を取得せよ。
```

```
*/
select u.name as user_name, p.name as product_name from orders o
join users u on o.user_id = u.id
join products p on o.product_id = p.id
group by u.id, u.name, p.id, p.name
having count(*) > 1;
```

```
/*
問題4. 月ごとの売上額 (price × quantity) を city ごとに集計し、売上の多い順
に並べて表示せよ (年・月・city・売上) 。
```

```
*/
select date_trunc('month', o.order_date)::date as month, u.city,
sum(p.price * o.quantity) as total_sales from orders o
join users u on o.user_id = u.id
join products p on o.product_id = p.id
group by date_trunc('month', o.order_date), u.city
order by total_sales desc;
```

```
/*
問題5. 商品ごとに、最初に注文したユーザーの名前とその注文日を表示せよ。
```

```
*/
select distinct on (p.id)
```

```
p.name as product_name,  
u.name as first_buyer,  
o.order_date  
from orders o  
join users u on o.user_id = u.id  
join products p on o.product_id = p.id  
order by p.id, o.order_date asc;
```