Challenge 2
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Questions:

2.1: What are the five customers that bought the most in USD?

```
-- 2.1
select "_CustomerID",sum("Order Quantity"*"Unit Price")
USD_spended
from sales_order
group by "_CustomerID"
order by sum("Order Quantity"*"Unit Price") desc
limit 5;
```

	_CustomerID	usd_spended
1	12	2248332.399999999
2	29	2112221.8999999994
3	17	1962014.6000000008
4	34	1937827.600000001
5	33	1895188.8000000003

2.2: What is the state the has sold the most in terms of units?

```
--2.2
select "State",sum("Order Quantity") Units_Sold
from store_locations join sales_order so on
store_locations."_StoreID" = so."_StoreID"
group by "State"
order by sum("Order Quantity") desc
limit 1;
```

	State	units_sold
1	California	7605

2.3: Which city in the state of Indiana have the biggest total of sales (units)?

```
--2.3
select "City Name",sum("Order Quantity") total_units_sold
from store_locations join sales_order so on
store_locations."_StoreID" = so."_StoreID"
where "State" = 'Indiana'
group by "City Name"
order by total_units_sold desc
limit 1;
```

	"City Name"	total_units_sold
1	Wayne	193

2.4: Which city has the biggest sales per capita (USD divided by city population)? 2.5: What is the product that has sold more (units)?

```
--2.4
select "City Name", "Population",
      sum("Order Quantity"*"Unit Price") USD_spended,
      (sum("Order Quantity"*"Unit Price"))/"Population" perCapta
from store_locations join sales_order so on
store_locations."_StoreID" = so."_StoreID"
group by "City Name","State","Population" -- Different
states can have cities with the same name
order by perCapta desc
limit 1;
```

City Name	Population	usd_spended	percapta
1 Broken Arrow	106563	490654.39999999997	4.6043598622411155

2.5: What is the product that has sold more (units)?

```
--2.5
select "Product Name", sum("Order Quantity")
total_units_sold
from products join sales_order so on products."_ProductID"
= so."_ProductID"
group by "Product Name"
order by total_units_sold desc
limit 1;
```

"Product Name"	total_units_sold
1 Accessories	956

2.6: What is the product that has sold more (units) in the city that has the largest amount of water area?

```
--2.6
select "Product Name",sum("Order Quantity")
total_units_sold,p."_ProductID"
from sales_order
join(select *
    from store_locations
    order by "Water Area" desc
    limit 1) as HWA on sales_order."_StoreID" =
HWA."_StoreID"
join products p on sales_order."_ProductID" =
p."_ProductID"
group by "Product Name", p."_ProductID"
order by total_units_sold desc
limit 1;
```

	"Product Name" ⇕	total_units_sold ⇕	"_ProductID" ⇕
1	Festive	13	43

2.7: What is the average delivery time (in days) in the region of Northeast?
Consider the delivery time as the time between the delivery date and the order
date.

```
--2.7
select
"Region",avg(date_part('day',"DeliveryDate"-"OrderDate"))
avg_delivery_in_days
from store_locations
join (select *
    from regions
    where "Region" ='Northeast') as NER on
store_locations."StateCode"=NER."StateCode"
join sales_order so on store_locations."_StoreID" =
so."_StoreID"
group by NER."Region";
```

	"Region" ⇕	avg_delivery_in_days ⇕
1	Northeast	20.81855670103093

2.8: What is the seller who obtained the most total profit? To calculate the profit
for an specific order, multiply the quantity sold by the difference between unit
price and unit cost.

```
--2.8
select "Sales Team",sum("Order Quantity"* ("Unit Price" -
"Unit Cost")) Profit
from sales_team join sales_order so on
sales_team."_SalesTeamID" = so."_SalesTeamID"
group by "Sales Team"
order by Profit desc
limit 1;
```

	Sales Team ⇕	profit ⇕
1	Donald Reynolds	1251542.9820000003