Bonus Question

Join All The Things

The following questions are related creating basic data tables that Danny and his team can use to quickly derive insights without needing to join the underlying tables using SQL.

Recreate the following table output using the available data:

Rank All The Things

Danny also requires further information about the ranking of customer products, but he purposely does not need the ranking for non-member purchases so he expects null ranking values for the records when customers are not yet part of the loyalty program.

Solution

```sql
with cte as (
select sales.customer_id as customer_id,order_date,product_name,price,
case when sales.customer_id in (select members.customer_id from members)
and order_date>=(select min(join_date) from members)
then 'Y' else 'N' end member,
ROW_NUMBER() over (partition by sales.customer_id order by order_date) rn
from sales
left join menu on sales.product_id=menu.product_id
left join members on sales.customer_id=members.customer_id
)
select customer_id,order_date,product_name,price,member,
case when member='Y' then rank() over (partition by customer_id,member order by order_date) else null end ranking
from cte
order by customer_id,order_date,product_name
```