Q1. What is the total amount each customer spent at the restaurant?

SELECT `dannys-diner-394605.sales.sales\_diner`.customer\_id,sum(`dannys-diner-394605.menu.menu\_diner`.price) as totalspent

FROM `dannys-diner-394605.menu.menu\_diner`

join `dannys-diner-394605.sales.sales\_diner`

on `dannys-diner-394605.menu.menu\_diner`.product\_id=`dannys-diner-394605.sales.sales\_diner`.product\_id

group by `dannys-diner-394605.sales.sales\_diner`.customer\_id

Q2. How many days has each customer visited the restaurant?

SELECT customer\_id,count(distinct order\_date) as numberofdays

FROM `dannys-diner-394605.sales.sales\_diner`

group by customer\_id

Q3. What was the first item from the menu purchased by each customer?

with final as (

SELECT a.\*,b.product\_name,

rank() over (partition by customer\_id order by order\_date) as ranking

FROM `dannys-diner-394605.sales.sales\_diner` a

join `dannys-diner-394605.menu.menu\_diner` b

on a.product\_id=b.product\_id)

select \* from final where ranking=1

Q4. What is the most purchased item on the menu and how many times was it purchased by all customers?

SELECT b.product\_name,count(\*)

FROM `dannys-diner-394605.menu.menu\_diner` b

join `dannys-diner-394605.sales.sales\_diner` a

on b.product\_id=a.product\_id

group by b.product\_name

Q5. Which item was the most popular for each customer?

with final as (

SELECT a.product\_name,b.customer\_id,count(\*) as total

FROM `dannys-diner-394605.menu.menu\_diner` a

join `dannys-diner-394605.sales.sales\_diner` b

on a.product\_id=b.product\_id

group by a.product\_name,b.customer\_id)

select product\_name,customer\_id,total,

rank() over(partition by customer\_id order by total desc) as ranking

from final

Q6. Which item was purchased first by the customer after they became a member?

with final as (

SELECT a.\* ,b.order\_date,c.product\_name,

rank() over(partition by b.customer\_id order by order\_date asc) as ranking

FROM `dannys-diner-394605.members.member\_danny` a

join `dannys-diner-394605.sales.sales\_diner` b

on a.customer\_id=b.customer\_id

join `dannys-diner-394605.menu.menu\_diner` c

on b.product\_id=c.product\_id

where b.order\_date>=a.join\_date)

select \*

from final

where ranking=1

Q7. Which item was purchased just before the customer became a member?

with final as(

SELECT a.\* ,b.order\_date,c.product\_name,

rank() over(partition by b.customer\_id order by order\_date asc) as ranking

FROM `dannys-diner-394605.members.member\_danny` a

join `dannys-diner-394605.sales.sales\_diner` b

on a.customer\_id=b.customer\_id

join `dannys-diner-394605.menu.menu\_diner` c

on b.product\_id=c.product\_id

where b.order\_date<a.join\_date)

select \* from final where ranking=1

Q8. What is the total items and amount spent for each member before they became a member?

with totalmembers as (

select a.customer\_id,a.join\_date,b.order\_date,c.product\_name,c.price

from `dannys-diner-394605.members.member\_danny` a

join `dannys-diner-394605.sales.sales\_diner` b

on a.customer\_id=b.customer\_id

join `dannys-diner-394605.menu.menu\_diner` c

on b.product\_id=c.product\_id

where b.order\_date<a.join\_date)

select customer\_id,sum(price),count(distinct product\_name)

from totalmembers

group by customer\_id

Q9. If each $1 spent equates to 10 points and sushi has a 2x points multiplier - how many points would each customer have?

with points as (SELECT a.customer\_id,b.product\_name,b.price,

case when b.product\_name='sushi'then 2\*b.price

else b.price end as newprice

FROM `dannys-diner-394605.sales.sales\_diner` a

join `dannys-diner-394605.menu.menu\_diner` b

on a.product\_id=b.product\_id)

select customer\_id, sum(newprice)\*10 as totalprice

from points

group by customer\_id

Q10. In the first week after a customer joins the program (including their join date) they earn 2x points on all items, not just sushi - how many points do customer A and B have at the end of January?

with finalpoints as (

select a.\*,b.order\_date,c.product\_name,

case when b.order\_date between a.join\_date

and (a.join\_date+interval 6 day) then 2\*c.price

else c.price end as newprice

from `dannys-diner-394605.members.member\_danny` a

left join `dannys-diner-394605.sales.sales\_diner` b

on a.customer\_id=b.customer\_id

join `dannys-diner-394605.menu.menu\_diner` c

on b.product\_id=c.product\_id

where b.order\_date<='2021-01-31')

select customer\_id,sum(newprice) as totalpoints

from finalpoints

group by customer\_id

select a.customer\_id,a.order\_date,b.product\_name,b.price,

case when a.order\_date<c.join\_date then 'N'

when c.join\_date is null then 'N'

else 'Y' end as member

FROM `dannys-diner-394605.sales.sales\_diner` a

join `dannys-diner-394605.menu.menu\_diner` b

on a.product\_id=b.product\_id

left join `dannys-diner-394605.members.member\_danny` c

on a.customer\_id=c.customer\_id

with ranking as(

select a.customer\_id,a.order\_date,b.product\_name,b.price,

case when a.order\_date<c.join\_date then 'N'

when c.join\_date is null then 'N'

else 'Y' end as member,

FROM `dannys-diner-394605.sales.sales\_diner` a

join `dannys-diner-394605.menu.menu\_diner` b

on a.product\_id=b.product\_id

left join `dannys-diner-394605.members.member\_danny` c

on a.customer\_id=c.customer\_id)

select \*,

case when member='N' then null

else

rank()over(partition by member,customer\_id order by order\_date) end as rankcalc

from ranking