Graphical user interface, application

Description automatically generated

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Case Study Questions

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

select s.customer\_id, mu.product\_name, sum(price) total

from dannys\_diner.sales s

left join dannys\_diner.members m on s.customer\_id = m.customer\_id

left join dannys\_diner.menu mu on mu.product\_id = s.product\_id

group by s.customer\_id, mu.product\_name

order by total desc;

-- 2. How many days has each customer visited the restaurant?

select s.customer\_id, count(distinct order\_date) total\_visit

from dannys\_diner.sales s

left join dannys\_diner.members m on s.customer\_id = m.customer\_id

left join dannys\_diner.menu mu on mu.product\_id = s.product\_id

group by s.customer\_id

order by total\_visit desc;

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

select s.customer\_id,

min(distinct order\_date),

m.product\_name

from dannys\_diner.sales s

left join dannys\_diner.menu m

on s.product\_id = m.product\_id

group by s.customer\_id, m.product\_name;

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

with sales\_date

as

(select customer\_id, min(date(order\_date)) as dt

from dannys\_diner.sales

group by 1)

select s.customer\_id, s.order\_date

from dannys\_diner.sales s

inner join sales\_date sd

on s.customer\_id = sd.customer\_id

and s.order\_date = sd.dt

inner join dannys\_diner.menu m

on m.product\_id = s.product\_id;

-- 5. Which item was the most popular for each customer?

with

purchase as

(select s.customer\_id, m.product\_name, count(s.product\_id) as total

from dannys\_diner.sales s

inner join dannys\_diner.menu m

on m.product\_id = s.product\_id

group by 1, 2

order by 1),

pur as

(select customer\_id, max(total) as pop

from purchase

group by customer\_id),

final as

(select p.customer\_id, p.product\_name, pi.pop

from purchase p

inner join pur pi

on p.customer\_id = pi.customer\_id

and p.total = pi.pop)

select \* from final;

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

with

cte as

(select s.customer\_id, s.order\_date, s.product\_id, m.join\_date,

min(order\_date) over(partition by s.customer\_id) as first\_date

from dannys\_diner.sales s

inner join dannys\_diner.members m

on s.customer\_id = m.customer\_id

where m.join\_date <= s.order\_date)

select c.customer\_id, order\_date, first\_date, product\_name

from cte c

left join dannys\_diner.menu m

on c.product\_id = m.product\_id

where order\_date = first\_date

order by c.customer\_id;

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

-- find the product bought before customer become member

with cte

as

(select s.customer\_id, s.order\_date, s.product\_id,

min(order\_date) over(partition by s.customer\_id) as first\_order\_date

from dannys\_diner.sales s

inner join dannys\_diner.members m

on s.customer\_id = m.customer\_id

where order\_date < join\_date)

select customer\_id, product\_name

from cte c

left join dannys\_diner.menu m

on c.product\_id = m.product\_id

where order\_date = first\_order\_date

order by c.customer\_id;

Customer 1 ordered sushi and curry, whereas customer 2 ordered curry before he/she became the member.

Ah ha! Sushi and curry are the favorite items in the restaurant

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

with

sales\_members as

(select m.customer\_id, s.product\_id

from dannys\_diner.members m

inner join dannys\_diner.sales s

on m.customer\_id = s.customer\_id

where order\_date < join\_date)

select c.customer\_id, count(m.product\_id), sum(price)

from sales\_members c

left join dannys\_diner.menu m

on c.product\_id = m.product\_id

group by c.customer\_id

order by c.customer\_id;

Customer B bought 3 items and spent 40. customer A spent less at 25 with 2 items.

Ah ha! Customer B could be a very potential customer

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

select s.customer\_id,

sum(case

when m.product\_name = 'sushi' then m.price \* 10 \* 2

else m.price \*10

end) as point

from dannys\_diner.sales s

inner join dannys\_diner.menu m

on s.product\_id = m.product\_id

group by s.customer\_id

order by customer\_id;

We got the total point for client A is 860, client B is 940, client C is 360

Updating..