Danny's Diner Case Study:

```
select * from sql_1_project.sales;
```

```
select * from sql_1_project.menu;
```

```
select * from sql_1_project.members;
```

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

```
select customer_id,sum(price) as totalSpent from sql_1_project.sales,sql_1_project.menu group by customer_id;
```

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

```
select customer_id, count(distinct(order_date)) from sql_1_project.sales group by customer_id;
```

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

```
with final as(select s.customer_id,m.product_name, rank() over (partition by customer_id  order by order_date) as ranking from sales as s, menu as m where s.product_id=m.product_id)
select * from final where ranking =1
```

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

```
select m.product_name, count(*) from sql_1_project.sales as s inner join sql_1_project.menu as m on s.product_id = m.product_id group by product_name;
```

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

```
with final as (
select s.customer_id, m.product_name, count(*) as total
 from sql_1_project.sales as s
 join sql_1_project.menu as m
 on s.product_id = m.product_id
 group by s.customer_id, m.product_name)
select customer_id, product_name, total,
rank() over (partition by customer_id order by total desc) as ranking
from final;
```

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

```
with final as(select s.*,ms.customer_id as customerid, ms.join_date, rank() over (partition by s.customer_id order by s.order_date) as ranking , m.product_name
from sql_1_project.sales as s join sql_1_project.members as ms on s.customer_id = ms.customer_id join sql_1_project.menu as m on s.product_id=m.product_id where s.order_date>= ms.join_date)
select customerid, ranking, product_name from final where ranking=1
```

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

```
select s.*,ms.customer_id as customerid, ms.join_date,
 rank() over (partition by s.customer_id order by s.order_date) as ranking , m.product_name
from sql_1_project.sales as s
join sql_1_project.members as ms
on s.customer_id = ms.customer_id
 join sql_1_project.menu as m
 on s.product_id=m.product_id where s.order_date < ms.join_date
```

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

```
with memberData as
 (select s.customer_id,s.order_date,ms.join_date,m.price,m.product_name
 from sql_1_project.sales as s
 left join sql_1_project.members as ms
 on s.customer_id=ms.customer_id
 join sql_1_project.menu as m
 on s.product_id = m.product_id
 where s.order_date < ms.join_date)
 select customer_id, sum(price),count(distinct(product_name))
 from memberData
 group by customer_id;
```

9.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 s.customer_id,m.product_name,m.price,
 case when m.product_name= "sushi" then 2*m.price
 else m.price end as newprice
 from sql_1_project.sales as s
 join sql_1_project.menu as m
 on s.product_id = m.product_id)
 select customer_id, sum(newprice)*10 from points
 group by customer_id;
```

10.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 s.customer_id,m.product_name,m.price,
case when m.product_name= "sushi" then 2*m.price
when s.order_date between ms.join_date and (ms.join_date + interval 6 day) then 2*m.price
else m.price end as newprice
from sql_1_project.sales as s
join sql_1_project.menu as m
on s.product_id = m.product_id
join sql_1_project.members as ms
on s.customer_id = ms.customer_id
where s.order_date<="2021-01-31")
select customer_id, sum(newprice)*10 from finalpoints
group by customer_id;
```