



Danny's Dinner week-1 Challenge



Danny's Dinner

Danny wants to use the data to answer a few simple questions about his customers, especially about their visiting patterns, how much money they've spent and also which menu items are their favourite. Having this deeper connection with his customers will help him deliver a better and more personalised experience for his loyal customers.

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



```
select  
dannys_diner.sales.customer_id,sum(dannys_diner.menu.price)  
from dannys_diner.sales join dannys_diner.menu on  
dannys_diner.menu.product_id=dannys_diner.sales.product_id  
group by dannys_diner.sales.customer_id  
order by dannys_diner.sales.customer_id
```

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



```
select dannys_diner.sales.customer_id,count(distinct
dannys_diner.sales.order_date) from
dannys_diner.sales
group by dannys_diner.sales.customer_id
order by dannys_diner.sales.customer_id
```


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



```
with cte as(select  
dannys_diner.sales.customer_id,dannys_diner.sales.product_id,dannys_diner.sal  
es.order_date,row_number() over(partition by dannys_diner.sales.customer_id  
order by dannys_diner.sales.order_date) as rn from dannys_diner.sales)
```

```
select cte.customer_id,dannys_diner.menu.product_name from cte  
join dannys_diner.menu on dannys_diner.menu.product_id=cte.product_id  
where cte.rn=1
```

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



```
select count(dannys_diner.sales.product_id) as  
max_purchased_item,dannys_diner.menu.product_name from  
dannys_diner.sales join dannys_diner.menu  
on dannys_diner.sales.product_id=dannys_diner.menu.product_id  
group by  
dannys_diner.sales.product_id,dannys_diner.menu.product_name  
order by max_purchased_item desc  
limit 1
```


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



```
with cte as(
select dannys_diner.sales.customer_id,dannys_diner.menu.product_name,
count(dannys_diner.sales.order_date) as no_of_orders,row_number() over(partition by
dannys_diner.sales.customer_id order by count(dannys_diner.sales.order_date)desc) as
rn from dannys_diner.sales join dannys_diner.menu on
dannys_diner.menu.product_id=dannys_diner.sales.product_id
group by dannys_diner.sales.customer_id,
dannys_diner.menu.product_name,)
```

```
select * from cte where rn=1
```

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



with cte as(

```
select dannys_diner.members.customer_id, count(dannys_diner.sales.order_date) as no_of_orders
,dannys_diner.sales.order_date,dannys_diner.menu.product_name,row_number() over(partition by
dannys_diner.sales.customer_id order by dannys_diner.sales.order_date) as rn from dannys_diner.sales join
dannys_diner.members on dannys_diner.sales.customer_id=dannys_diner.members.customer_id
join dannys_diner.menu on dannys_diner.menu.product_id=dannys_diner.sales.product_id
where dannys_diner.members.join_date<=dannys_diner.sales.order_date
```

group by

```
dannys_diner.members.customer_id,dannys_diner.menu.product_name,dannys_diner.sales.customer_id,dannys_diner.sales.
order_date
```

```
order by dannys_diner.sales.order_date
```

)

```
select * from cte where rn=1
```


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



```
with cte as(
select dannys_diner.members.customer_id, count(dannys_diner.sales.order_date) as no_of_orders
,dannys_diner.sales.order_date,dannys_diner.menu.product_name,row_number() over(partition by
dannys_diner.sales.customer_id order by dannys_diner.sales.order_date desc) as rn from dannys_diner.sales join
dannys_diner.members on dannys_diner.sales.customer_id=dannys_diner.members.customer_id
join dannys_diner.menu on dannys_diner.menu.product_id=dannys_diner.sales.product_id
where dannys_diner.members.join_date>dannys_diner.sales.order_date
  group by
dannys_diner.members.customer_id,dannys_diner.menu.product_name,dannys_diner.sales.customer_id,dannys_diner.
sales.order_date
  order by dannys_diner.sales.order_date
)
select * from cte where rn=1
```

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



```
select dannys_diner.members.customer_id, count(dannys_diner.sales.order_date) as  
no_of_items ,sum(dannys_diner.menu.price) as amount_spent from dannys_diner.sales join  
dannys_diner.members on  
dannys_diner.sales.customer_id=dannys_diner.members.customer_id  
join dannys_diner.menu on dannys_diner.menu.product_id=dannys_diner.sales.product_id  
where dannys_diner.members.join_date>dannys_diner.sales.order_date  
group by dannys_diner.members.customer_id,dannys_diner.sales.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?



```
select dannys_diner.sales.customer_id,sum(case when
dannys_diner.menu.product_name='sushi' then dannys_diner.menu.price*10*2
else dannys_diner.menu.price*10 end)as points from dannys_diner.sales join
dannys_diner.menu on
dannys_diner.menu.product_id=dannys_diner.sales.product_id
group by dannys_diner.sales.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?



```
select dannys_diner.sales.customer_id,sum(dannys_diner.menu.price*10*2) as points
from dannys_diner.sales join dannys_diner.members on
dannys_diner.sales.customer_id=dannys_diner.members.customer_id
join dannys_diner.menu on
dannys_diner.menu.product_id=dannys_diner.sales.product_id
where dannys_diner.sales.order_date between dannys_diner.members.join_date and
'2021-01-31'
group by dannys_diner.sales.customer_id
```




Thank you!