Danny's 8 Week SQL Challenge

Case Study #1 – Danny's Diner

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

The total amount each customer spent at the restaurant are as shown. Customer with id of A spent $76, customer with id B spent $74, and customer with id C spent $36.

Query #2 Execution time: 10ms

customer_id	spent
B	74
C	36
A	76

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

Customer A has visited 4 different days. Customer B has visited 6 different days. Customer C has visited 2 different days.

Results

count	customer_id
4	A
6	B
2	C

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

The first item customer A bought from the menu was Sushi and Curry. The first item customer B bought from the menu was curry. And the first item customer C bought from the menu was ramen, two of them to be exact.

Query #4 **Execution time: 0ms**

customer_id	product_name
A	sushi
B	curry
A	curry
C	ramen
C	ramen

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

Ramen was the most purchased item on the menu. Both Customer A and C purchased ramen three times, while customer B purchased ramen two times.

Query #5 **Execution time: 1ms**

product_name	count
ramen	8
sushi	3
curry	4

Query #6 **Execution time: 0ms**

customer_id	count
B	2
C	3
A	3

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

Customer A bought ramen the most. Customer C bought ramen the most. Customer B bought all items on the menu the same number of times.

Query #7 Execution time: 1ms

customer_id	product_name	count
A	curry	2
A	ramen	3
A	sushi	1
B	curry	2
B	ramen	2
B	sushi	2
C	ramen	3

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

The first item purchased by customer A after they became a member was curry. The first item purchased by customer B after they became a member was sushi.

customer_id	order_date	product_name
A	2021-01-07T00:00:00.000Z	curry
A	2021-01-10T00:00:00.000Z	ramen
A	2021-01-11T00:00:00.000Z	ramen
A	2021-01-11T00:00:00.000Z	ramen
B	2021-01-11T00:00:00.000Z	sushi
B	2021-01-16T00:00:00.000Z	ramen
B	2021-02-01T00:00:00.000Z	ramen

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

The last item purchased before becoming a member was curry for customer A and sushi for customer B.

Query #9 Execution time: 1ms

customer_id	order_date	product_name
A	2021-01-01T00:00:00.000Z	sushi
A	2021-01-01T00:00:00.000Z	curry
B	2021-01-01T00:00:00.000Z	curry
B	2021-01-02T00:00:00.000Z	curry
B	2021-01-04T00:00:00.000Z	sushi
A	2021-01-07T00:00:00.000Z	curry

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

Customer B bought three items and spent $40 before they became a member. Customer A bought two items and spent $25 before they became a member.

Query #10 Execution time: 0ms

customer_id	count	sum
B	3	40
A	2	25

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

Customer B has 940 points, Customer A has 860 points, and Customer C has 360 points.

Results

customer_id	points
B	940
C	360
A	860

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?

Customer A has 1370 points. Customer B has 820 points.

Query #12 Execution time: 1ms

customer_id	points
A	1370
B	820