

Questions Set With Query

1.What is the total amount each customer spent on Zomato?

```
SELECT s.userid, SUM(p.price) AS total_spent
FROM sales AS s
JOIN product AS p ON s.product_id = p.product_id
GROUP BY s.userid
ORDER BY s.userid;
```

	userid	total_spent
▶	1	5230
	2	2510
	3	4570

2.How many days has each customer visited Zomato?

```
SELECT s.userid, COUNT(DISTINCT s.created_date) AS days_visited FROM sales AS s GROUP BY
s.userid ORDER BY s.userid;
```

	userid	days_visited
▶	1	7
	2	4
	3	5

3.What is the first product purchased by each customer after signup?

```
SELECT s.userid, p.product_name AS first_product
FROM sales AS s
JOIN product AS p ON s.product_id = p.product_id
JOIN users AS u ON s.userid = u.userid
WHERE s.created_date >= u.signup_date
AND s.created_date = (
    SELECT MIN(created_date)
    FROM sales
    WHERE userid = s.userid
)
ORDER BY s.userid;
```

	userid	first_product
▶	1	p1
	2	p1
	3	p1

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

```
SELECT p.product_name, COUNT(s.product_id) AS purchase_count
FROM sales AS s
JOIN product AS p ON s.product_id = p.product_id
GROUP BY p.product_name
ORDER BY purchase_count DESC
LIMIT 1;
```

	product_name	purchase_count
▶	p2	7

5. Which item is favourite for each customer?

```
WITH star AS (
  SELECT userid, product_id, COUNT(product_id) AS m
  FROM sales
  GROUP BY userid, product_id),
star2 AS (
  SELECT *, RANK() OVER (PARTITION BY userid ORDER BY m DESC) AS fav_product
  FROM star)
SELECT userid, product_id, m
FROM star2
WHERE fav_product = 1;
```

userid	product_id	m
1	2	3
2	3	2
3	2	3

6. Which item was first purchased by a customer after becoming a gold member?

```
SELECT s.userid, p.product_name, MIN(s.created_date) AS first_purchase_date
FROM sales AS s
JOIN product AS p ON s.product_id = p.product_id
JOIN goldusers_signup AS g ON s.userid = g.userid
WHERE s.created_date > g.gold_signup_date
GROUP BY s.userid, p.product_name
ORDER BY s.userid
```

userid	product_name	first_purchase_date
1	p2	2019-10-23
1	p3	2018-03-19
3	p1	2019-12-18
3	p2	2017-12-07

7. Which item was purchased just before becoming a member?

```
SELECT s.userid, p.product_name, MAX(s.created_date) AS last_purchase_date
FROM sales AS s
JOIN product AS p ON s.product_id = p.product_id
JOIN goldusers_signup AS g ON s.userid = g.userid
WHERE s.created_date < g.gold_signup_date
GROUP BY s.userid, p.product_name
ORDER BY s.userid;
```

userid	product_name	last_purchase_date
1	p1	2016-11-09
1	p2	2017-04-19
1	p3	2016-05-20
3	p1	2016-11-10
3	p2	2016-12-20

8.What is the total orders and amount spent by each customer before they became a member?

```
SELECT s.userid,
       COUNT(s.product_id) AS total_orders,
       SUM(p.price) AS total_amount_spent
FROM sales AS s
JOIN product AS p ON s.product_id = p.product_id
JOIN goldusers_signup AS g ON s.userid = g.userid
WHERE s.created_date < g.gold_signup_date
GROUP BY s.userid
ORDER BY s.userid;
```

userid	total_orders	total_amount_spent
1	5	4030
3	3	2720

9. Rank all the transactions of the customers.

```
SELECT s.userid,  
       s.created_date,  
       p.product_name,  
       p.price,  
       RANK() OVER (PARTITION BY s.userid ORDER BY p.price DESC) AS transaction_rank  
FROM sales AS s  
JOIN product AS p ON s.product_id = p.product_id  
ORDER BY s.userid, transaction_rank;
```

userid	created_date	product_name	price	transaction_rank
1	2016-11-09	p1	980	1
1	2016-03-11	p1	980	1
1	2017-04-19	p2	870	3
1	2019-10-23	p2	870	3
1	2017-03-11	p2	870	3
1	2018-03-19	p3	330	6
1	2016-05-20	p3	330	6
2	2017-09-24	p1	980	1
2	2017-11-08	p2	870	2
2	2020-07-20	p3	330	3
2	2018-09-10	p3	330	3
3	2019-12-18	p1	980	1
3	2016-11-10	p1	980	1
3	2016-12-20	p2	870	3
3	2017-12-07	p2	870	3
3	2016-12-15	p2	870	3

11. What is the total number of orders each customer made, and how much did each customer spend on average per order?

```
SELECT s.userid,  
       COUNT(s.product_id) AS total_orders,  
       AVG(p.price) AS avg_order_value  
FROM sales AS s  
JOIN product AS p ON s.product_id = p.product_id  
GROUP BY s.userid;
```

userid	total_orders	avg_order_value
1	7	747.1429
3	5	914.0000
2	4	627.5000

12. What is the most expensive product purchased by each customer?

```
SELECT s.userid,  
       p.product_name,  
       MAX(p.price) AS most_expensive_product  
FROM sales AS s  
JOIN product AS p ON s.product_id = p.product_id  
GROUP BY s.userid;
```

userid	total_orders	avg_order_value
1	7	747.1429
3	5	914.0000
2	4	627.5000