# ZOMATO

( Demo project )

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# Introduction

Welcome to my Zomato demo project! This initiative showcases a custom database schema encompassing sales, products, and user data, including specialized features like Gold user privileges. While the data currently used is for practice purposes, the project demonstrates key concepts and functionalities crucial for understanding Zomato's operations and database management.

# Create gold user member table and insert value in it ?

## Create table

```
CREATE TABLE goldusers_signup
(userid integer,
gold_signup_date date  );
```

## Insert Values

```
INSERT INTO goldusers_signup
(userid , gold_signup_date )
VALUES
("1", "2017-09-22" ) ,
("3", "2017-04-21") ;
```

# Create another table [users] in same schema and insert value in it ?

## Create table

```
CREATE TABLE users
( userid integer,
signup_date date  );
```

## Insert Values

```
INSERT INTO users
(userid , signup_date )
VALUES
("1" , "2014-09-02" ) ,
("2" , "2015-01-15" ) ,
("3" , "2014-04-11" ) ;
```

# Create another table [product] in same schema and insert value in it ?

## Create table

```
CREATE TABLE product
( product_id integer,
product_name text,
price integer );
```

## Insert Values

```
INSERT INTO product
(product_id , product_name , price)
VALUES
("1", "p1", "980"),
("2", "p2", "870"),
("3", "p3", "330");
```

# Create another table [sales] in same schema and insert value in it ?

## Create table

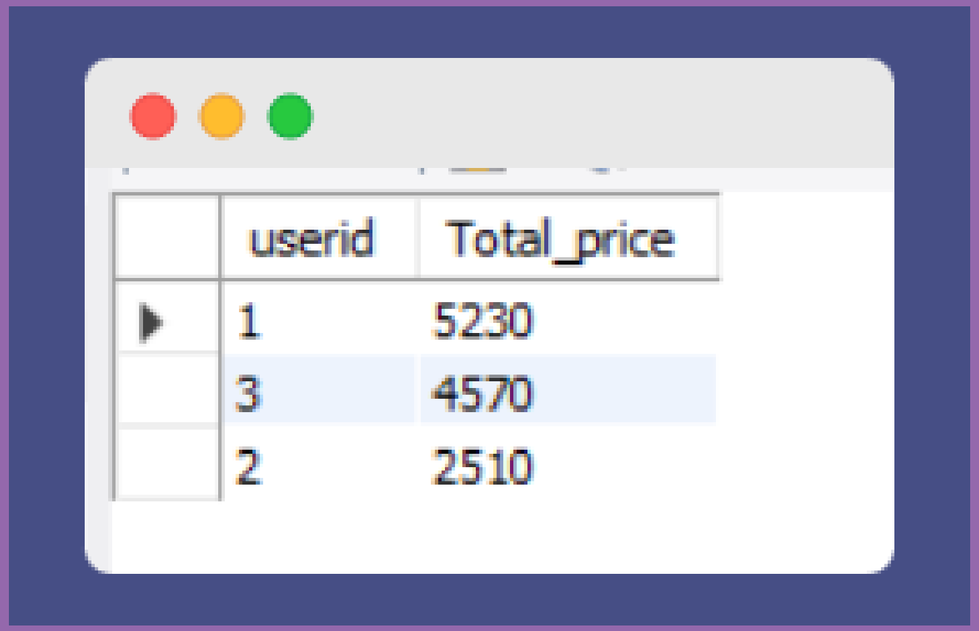
```
CREATE TABLE sales
( userid integer,
created_date date,
product_id integer  );
```

## Insert Values

```
INSERT INTO sales
(userid,created_date,product_id)
VALUES
("1", "2017-04-19", "2" ) ,
("3", "2019-12-18", "1" ) ,
("2", "2020-07-20", "3" ) ,
("1", "2019-10-23", "2" ) ,
("1", "2018-03-19", "3" ) ,
("3", "2016-12-20", "2" ) ,
("1", "2016-11-09", "1" ) ,
("1", "2016-05-20", "3" ) ,
("2", "2017-09-24", "1" ) ,
("1", "2017-03-11", "2" ) ,
("1", "2016-03-11", "1" ) ,
("3", "2016-11-10", "1" ) ,
("3", "2017-12-07", "2" ) ,
("3", "2016-12-15", "2" ) ,
("2", "2017-11-08", "2" ) ,
("2", "2018-09-10", "3" ) ;
```

# 1. what is the total amount each customer spent on zomato?

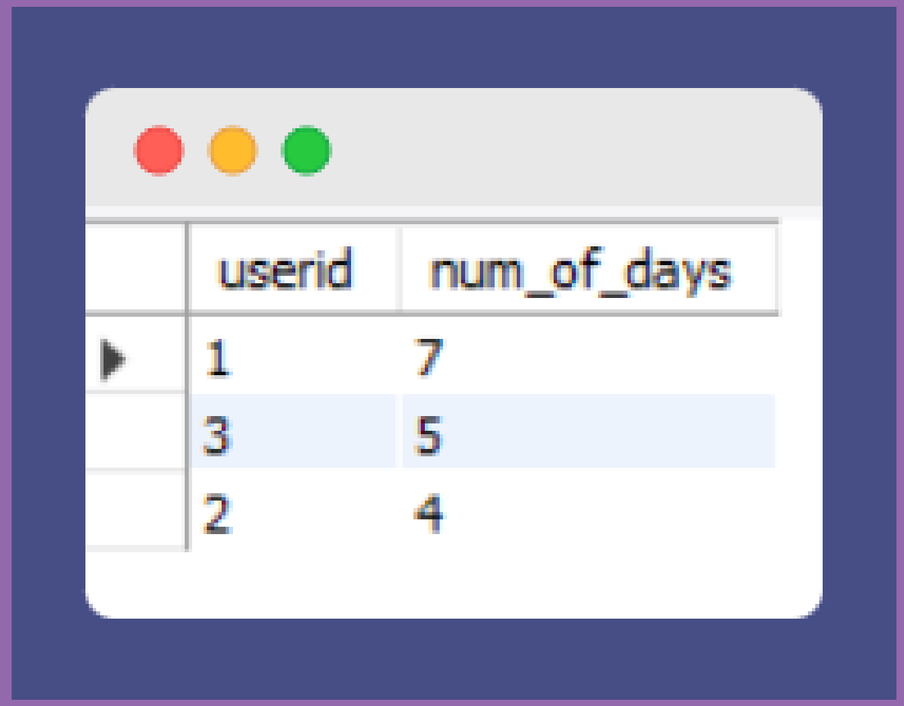
```
SELECT a.userid , SUM(b.price) AS Total_price FROM sales a
INNER JOIN product b ON a.product_id = b.product_id
GROUP BY userid ;
```



| userid | Total_price |
|---|---|
| 1 | 5230 |
| 3 | 4570 |
| 2 | 2510 |

# 2. How many days each customer visit zomato?

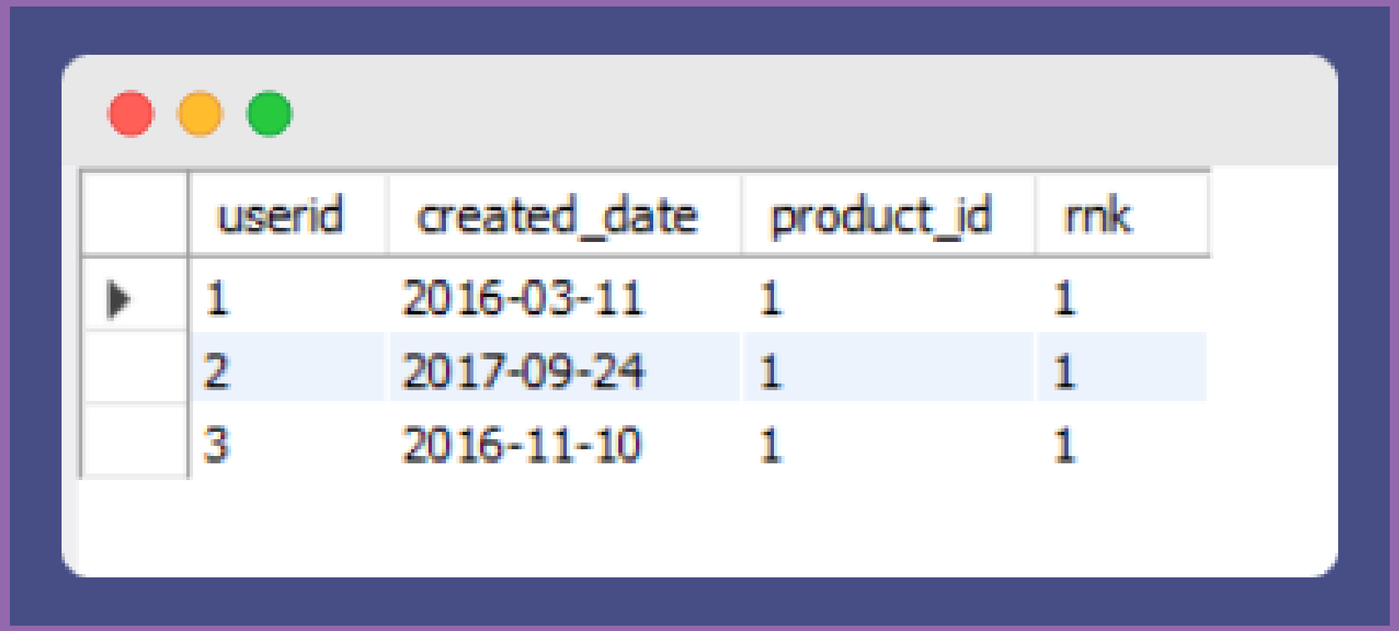
```
SELECT userid , COUNT(created_date) AS num_of_days FROM sales
GROUP BY userid ;
```



| userid | num_of_days |
|---|---|
| 1 | 7 |
| 3 | 5 |
| 2 | 4 |

# 3. what was the first product purchased by each customer ?

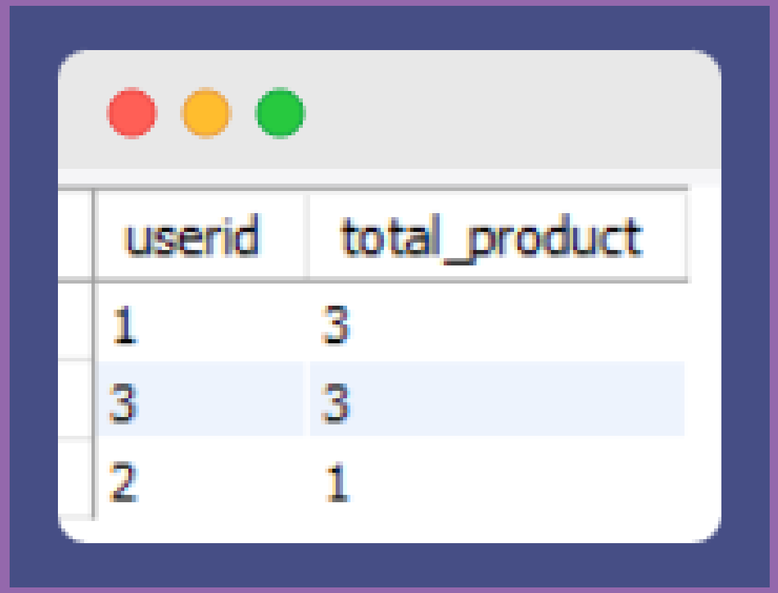
```
SELECT * FROM
( SELECT*, RANK( ) OVER ( PARTITION BY userid ORDER BY created_date) rnk
FROM sales) a WHERE rnk = 1 ;
```



| userid | created_date | product_id | rnk |
|---|---|---|---|
| 1 | 2016-03-11 | 1 | 1 |
| 2 | 2017-09-24 | 1 | 1 |
| 3 | 2016-11-10 | 1 | 1 |

# 4. what is the most purchased item on the menu and how many time was it purchased by all customer ?

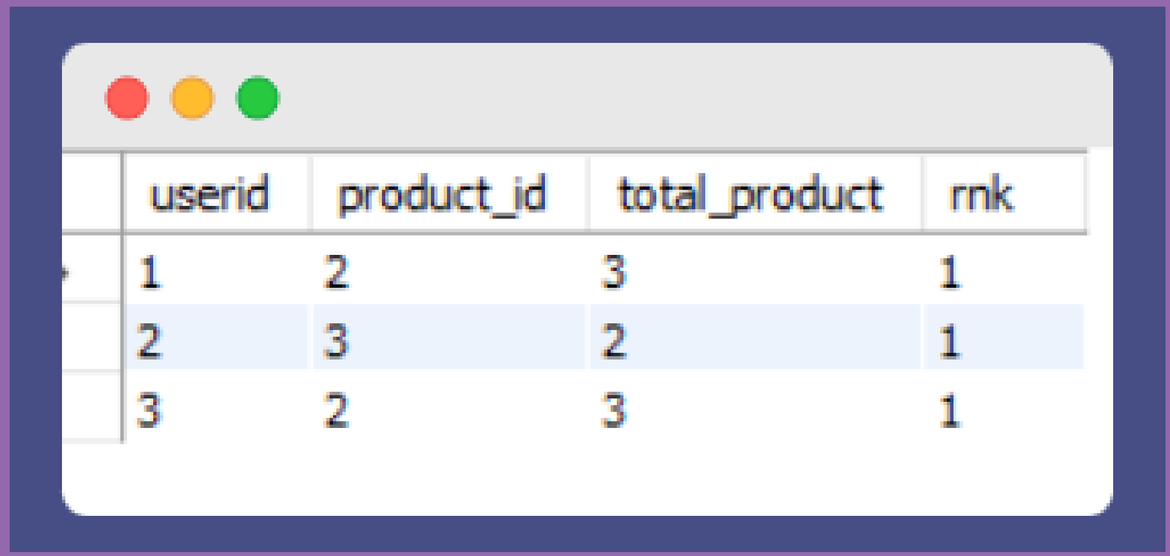
```
SELECT userid, COUNT(product_id) AS total_product FROM sales WHERE
product_id =
(SELECT product_id FROM sales GROUP BY product_id ORDER BY
COUNT(product_id) DESC LIMIT 1 )
GROUP BY userid ;
```



| userid | total_product |
|---|---|
| 1 | 3 |
| 3 | 3 |
| 2 | 1 |

# 5. which item was the most popular for each customer ?

```
SELECT * FROM
( SELECT * , RANK() OVER (PARTITION BY  userid ORDER BY total_product
DESC ) rnk FROM
(SELECT userid , product_id , COUNT(product_id) AS total_product FROM sales
GROUP BY userid,product_id )a)b
WHERE rnk = 1 ;
```



| userid | product_id | total_product | rnk |
|---|---|---|---|
| 1 | 2 | 3 | 1 |
| 2 | 3 | 2 | 1 |
| 3 | 2 | 3 | 1 |

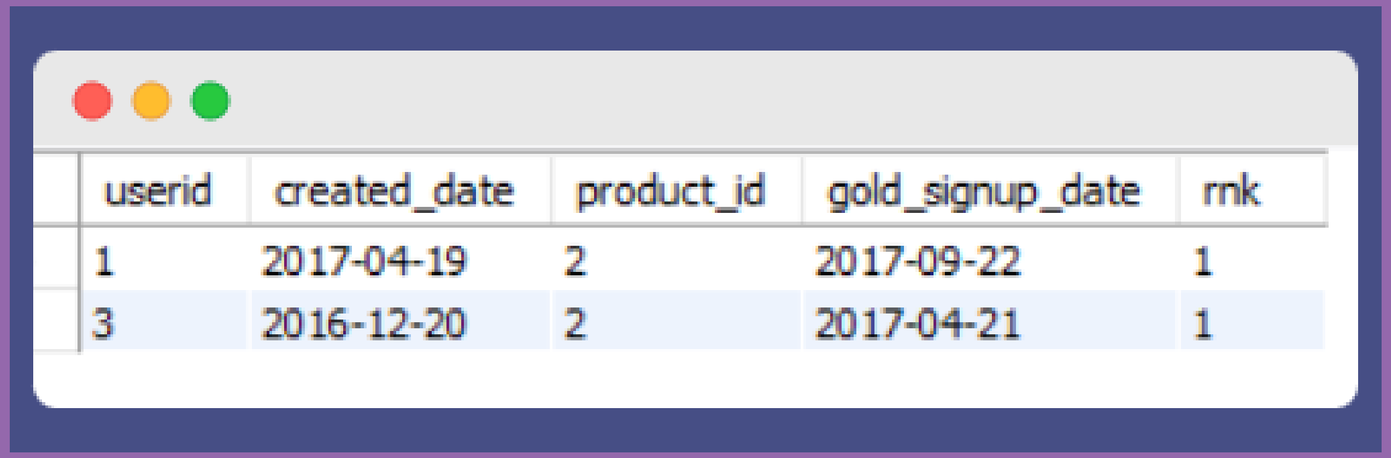
# 6. which item purchased first by the customer after they became a member ?

```
SELECT * FROM
(SELECT * , RANK() OVER(PARTITION BY userid ORDER BY  created_date) rnk
FROM
(SELECT a.userid , a.created_date , a.product_id , b.gold_signup_date FROM sales
a INNER JOIN goldusers_signup b ON a.userid = b.userid
WHERE created_date >= gold_signup_date )c )d WHERE rnk = 1;
```

| userid | created_date | product_id | gold_signup_date | rnk |
|---|---|---|---|---|
| 1 | 2018-03-19 | 3 | 2017-09-22 | 1 |
| 3 | 2017-12-07 | 2 | 2017-04-21 | 1 |

# 7. which item purchased just before the customer became a member ?

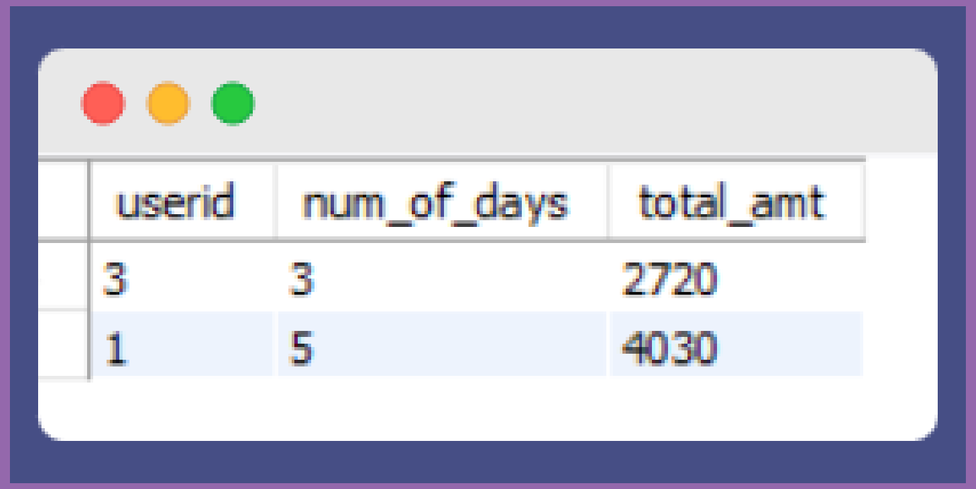
```
SELECT * FROM
(SELECT * , RANK() OVER(PARTITION BY userid ORDER BY created_date DESC)
rnk FROM
(SELECT a.userid , a.created_date , a.product_id , b.gold_signup_date FROM sales
a INNER JOIN goldusers_signup b ON a.userid = b.userid
WHERE created_date <= gold_signup_date )c )d WHERE rnk = 1;
```



| userid | created_date | product_id | gold_signup_date | rnk |
|---|---|---|---|---|
| 1 | 2017-04-19 | 2 | 2017-09-22 | 1 |
| 3 | 2016-12-20 | 2 | 2017-04-21 | 1 |

# 8. what is the total orders and amount spent for each member before they became a member

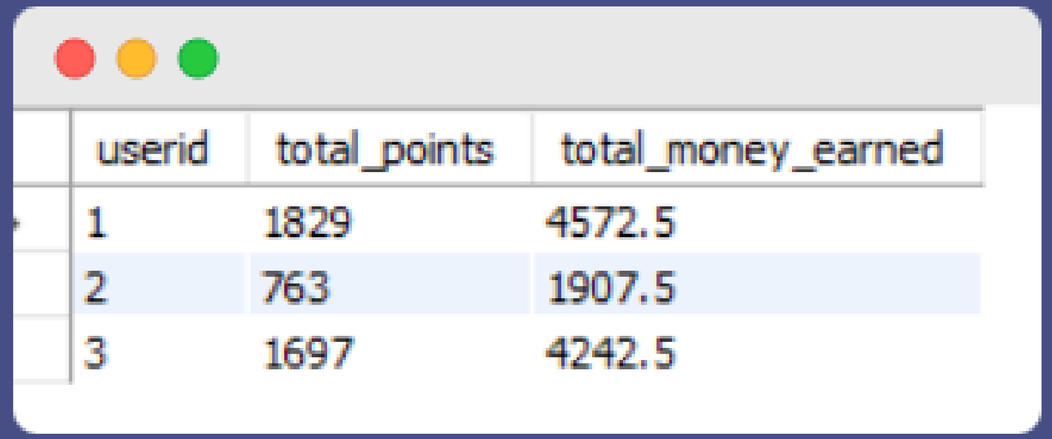
```
SELECT userid , COUNT(created_date) AS num_of_days , SUM(price) AS total_amt FROM
(SELECT c.* , d.price FROM
(SELECT a.userid , a.created_date , a.product_id , b.gold_signup_date FROM sales a INNER JOIN
goldusers_signup b ON a.userid = b.userid
AND created_date <= gold_signup_date )c INNER JOIN product d ON c.product_id = d.product_id)e
GROUP BY userid ;
```



| userid | num_of_days | total_amt |
|---|---|---|
| 3 | 3 | 2720 |
| 1 | 5 | 4030 |

9. If buying each point generates for eg 5rs = 2 zomato point and each product has different purchasing points
for eg. for p1 5rs = 1, zomato point, for p2 10rs = 5, zomato point and p3 5rs = 1 zomato point calculate points collected by each customers and for which product most points have been given till now?

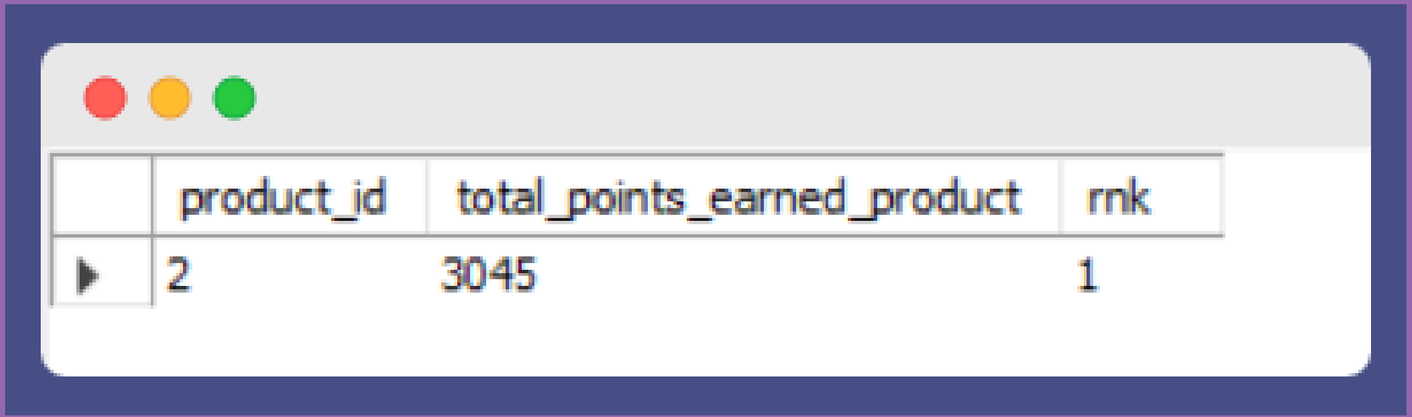
```
SELECT userid , SUM(total_points) AS total_points, SUM(total_points) *2.5  AS  total_money_earned FROM
(select e.* , round(total_Amt/points,0) AS total_points FROM
(SELECT d.* ,
 CASE WHEN product_id = 1 THEN 5 WHEN product_id = 2 THEN 2 WHEN product_id = 3 THEN 5
 ELSE 0 END AS points FROM
(SELECT c.userid, c.product_id , SUM(price) AS total_amt FROM
(SELECT a.* , b.price FROM sales a INNER JOIN product b ON a.product_id = b.product_id)c
GROUP BY userid , product_id ORDER BY  userid ASC )d)e)f
GROUP BY userid ;
```



| userid | total_points | total_money_earned |
|---|---|---|
| 1 | 1829 | 4572.5 |
| 2 | 763 | 1907.5 |
| 3 | 1697 | 4242.5 |

# 9(i) which product most points have been given till now ?

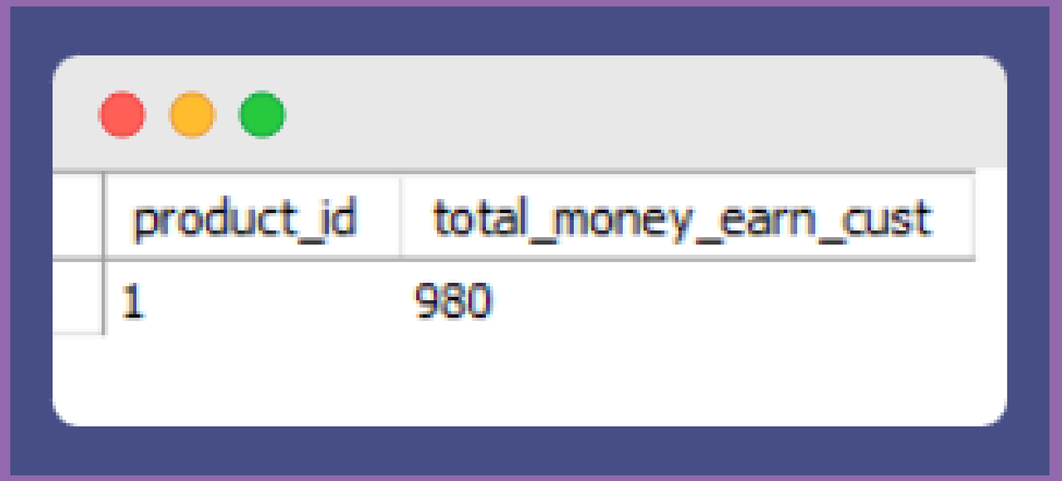
```
SELECT product_id , SUM(total_points) AS total_money_earn_cust FROM
(SELECT e.* , ROUND(total_Amt/points,0) AS total_points FROM
(SELECT d.* , CASE WHEN product_id = 1 THEN 5 WHEN product_id = 2 THEN 2 WHEN product_id = 3 THEN 5
ELSE 0 END AS points FROM
(SELECT c.userid , c.product_id , SUM(price) AS total_Amt FROM
(SELECT a.* , b.price FROM sales a INNER JOIN product b ON a.product_id = b.product_id)c
GROUP BY userid, product_id ORDER BY userid ASC) d)e)f
GROUP BY product_id LIMIT 1 ;
```



| | product_id | total_points_earned_product | rnk |
|---|---|---|---|
| ▶ | 2 | 3045 | 1 |

10. In the first one year after a custome joins the gold program (including their join date) irrespective of what the customer has purchased they earn 5 zomato points for every 10rs spent who earned more 1 or 3 and what was their points earnings in their first year?
1 zomato point = 2 rupees
0.5 zomato point = 1 rupees

```
SELECT c.* , d.prics * 0.5 AS total_amt FROM
(SELECT a.userid, a.product_id , a.created_date, b.gold_signup_date FROM sales a LEFT JOIN goldusers_signup b
ON a.userid = b.userid
AND created_date >= gold_signup_date AND created_date <= dateadd(YEAR , 1 , gold_signup_date))c INNER
JOIN product d ON c.product_id = d.product_id ;
```



| product_id | total_money_earn_cust |
|---|---|
| 1 | 980 |

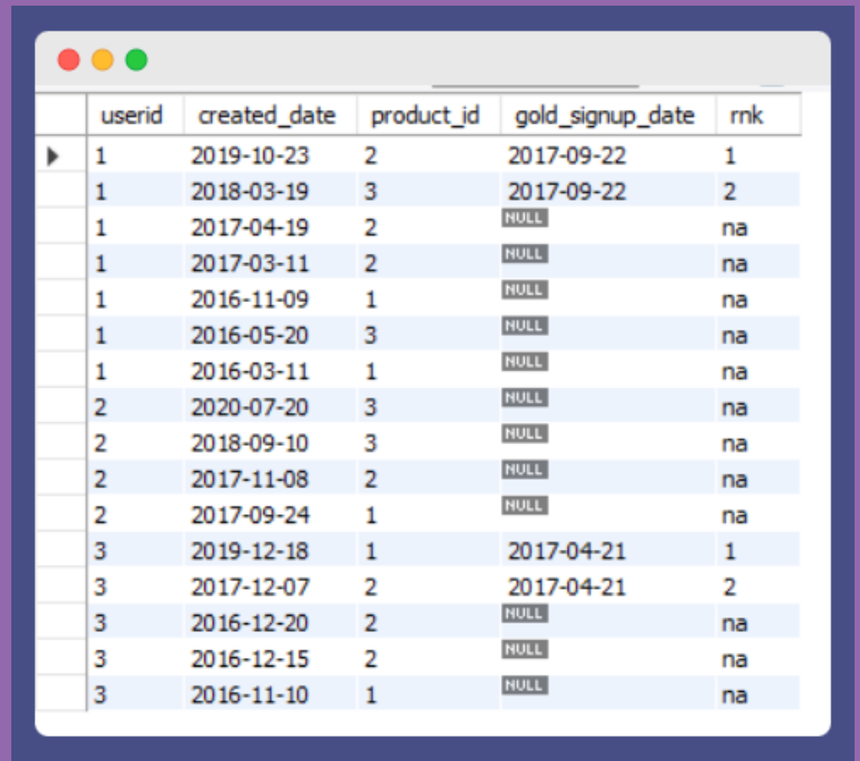
# 11. Rank all the transaction of customer ?

SELECT *, RANK() OVER(PARTITION BY userid ORDER BY created_date ) rnk FROM sales ;

| userid | created_date | product_id | rnk |
|---|---|---|---|
| 1 | 2016-03-11 | 1 | 1 |
| 1 | 2016-05-20 | 3 | 2 |
| 1 | 2016-11-09 | 1 | 3 |
| 1 | 2017-03-11 | 2 | 4 |
| 1 | 2017-04-19 | 2 | 5 |
| 1 | 2018-03-19 | 3 | 6 |
| 1 | 2019-10-23 | 2 | 7 |
| 2 | 2017-09-24 | 1 | 1 |
| 2 | 2017-11-08 | 2 | 2 |
| 2 | 2018-09-10 | 3 | 3 |
| 2 | 2020-07-20 | 3 | 4 |
| 3 | 2016-11-10 | 1 | 1 |
| 3 | 2016-12-15 | 2 | 2 |
| 3 | 2016-12-20 | 2 | 3 |
| 3 | 2017-12-07 | 2 | 4 |
| 3 | 2019-12-18 | 1 | 5 |

# 12. Rank all the transaction of member who is gold member and for non gold member trancastion mark as "na" ?

```
SELECT c.* ,
CASE WHEN gold_signup_date IS NULL THEN "na" ELSE RANK() OVER(PARTITION BY userid
ORDER BY created_date DESC) END AS rnk FROM
(SELECT a.userid , a.created_date ,a.product_id, b.gold_signup_date FROM sales a LEFT JOIN
goldusers_signup b ON a.userid = b.userid AND
 created_date >= gold_signup_date)c ;
```



| userid | created_date | product_id | gold_signup_date | rnk |
|---|---|---|---|---|
| 1 | 2019-10-23 | 2 | 2017-09-22 | 1 |
| 1 | 2018-03-19 | 3 | 2017-09-22 | 2 |
| 1 | 2017-04-19 | 2 | NULL | na |
| 1 | 2017-03-11 | 2 | NULL | na |
| 1 | 2016-11-09 | 1 | NULL | na |
| 1 | 2016-05-20 | 3 | NULL | na |
| 1 | 2016-03-11 | 1 | NULL | na |
| 2 | 2020-07-20 | 3 | NULL | na |
| 2 | 2018-09-10 | 3 | NULL | na |
| 2 | 2017-11-08 | 2 | NULL | na |
| 2 | 2017-09-24 | 1 | NULL | na |
| 3 | 2019-12-18 | 1 | 2017-04-21 | 1 |
| 3 | 2017-12-07 | 2 | 2017-04-21 | 2 |
| 3 | 2016-12-20 | 2 | NULL | na |
| 3 | 2016-12-15 | 2 | NULL | na |
| 3 | 2016-11-10 | 1 | NULL | na |