-- A. Roll Metrix

-- B. Driver and Customer Experience

-- C. Ingredient optimization

-- D. Pricing and Rating

1. How many rolls were ordered?

```
select count(roll_id) as number_of_rolls from customer_orders;
```

2. How many unique customers' orders were made ?

```
select count(distinct customer_id) as no_of_customers from customer_orders;
```

3. How many successful orders were delivered by each driver?

```
select driver_id, count(distinct order_id) as no_of_orders from driver_order
where cancellation not in ('Customer Cancellation', 'Cancellation')
```

```
group by driver_id;
```

4. How many of each type of roll was delivered?

```
select roll_id, count(roll_id) from customer_orders where order_id in ( select order_id from

(select *,case when cancellation in ('Cancellation', 'Customer Cancellation') then 'c' else 'nc'

end as order_cancel_details from driver_order)a

where order_cancel_details= 'nc') group by roll_id;
```

5. How Many veg and non veg rolls ordered by each customer?

```
select a.*, b.roll_name from

(select  customer_id, roll_id, count(roll_id) from customer_orders group by customer_id, roll_id)a
join rolls b on a.roll_id = b.roll_id;
```

6. What was the maximum number of rolls delivered in a single order?

```
select order_id, count(roll_id) from  (

select * from customer_orders where order_id in(

select order_id from

(select *,case when cancellation in ('Cancellation', 'Customer Cancellation') then 'c' else 'nc'

end as order_cancel_details from driver_order)a

where order_cancel_details= 'nc'))b

group by order_id order by count(roll_id) desc limit 1;
```

7. For each customer, how many delivered rolls had at least 1 change and how many had no change?

```
with temp_customer_orders (order_id, customer_id, roll_id, not_include_items,
extra_items_included, order_date) as (

select order_id, customer_id, roll_id,

case when not_include_items is null or not_include_items = '' then 0 else not_include_items end as
new_not_include_items,
```

```
case when extra_items_included is null or extra_items_included = '' or extra_items_included = 'NaN'
then '0' else extra_items_included end as new_extra_items_included,

order_date from customer_orders

),

 temp_delivered_orders (order_id, driver_id, pickup_time, distance, duration, new_cancellation) as (

select order_id order_id, driver_id, pickup_time, distance, duration,

case when cancellation in ('Cancellation', 'Customer Cancellation') then 0 else 1 end as
new_cancellation

from driver_order

)


select customer_id, chg_no_chg, count(order_id) from

(

select *, case when not_include_items = '0' and extra_items_included = '0' then 'no_change' else
'change' end as chg_no_chg from temp_customer_orders where order_id in (

select order_id from temp_delivered_orders where new_cancellation != 0 ))a

group by customer_id, chg_no_chg;
```

8. How many rolls were delivered that had both exclusions and extra?

```
with temp_customer_orders (order_id, customer_id, roll_id, not_include_items,
extra_items_included, order_date) as (

select order_id, customer_id, roll_id,

case when not_include_items is null or not_include_items = '' then 0 else not_include_items end as
new_not_include_items,

case when extra_items_included is null or extra_items_included = '' or extra_items_included = 'NaN'
then '0' else extra_items_included end as new_extra_items_included,

order_date from customer_orders

),


temp_delivered_orders (order_id, driver_id, pickup_time, distance, duration, new_cancellation) as (

select order_id order_id, driver_id, pickup_time, distance, duration,
```

```
case when cancellation in ('Cancellation', 'Customer Cancellation') then 0 else 1 end as
new_cancellation

from driver_order

)

select chg_no_chg, count(chg_no_chg) from

(

select *, case when not_include_items != 0 and extra_items_included != 0 then 'both inc exc' else
'either 1 inc or exc' end as chg_no_chg

from temp_customer_orders

 where order_id in

(

select order_id from temp_delivered_orders where new_cancellation !=0 )

)a group by chg_no_chg;
```

9. What was the total number of rolls ordered for each hour of the day?

```
select hour_bucket, count(hour_bucket) as no_of_orders from

(SELECT *,

      CONCAT(CAST(HOUR(order_date) AS CHAR(2)), '-', CAST(HOUR(order_date) + 1 AS CHAR(2))) AS
hour_bucket

FROM customer_orders)a group by hour_bucket;
```

10. what was the number of orders for each day of week?

```
select Day_of_week, count(Day_of_week) from

(select *, dayname(order_date) as Day_of_week from customer_orders )a group by Day_of_week;
```

11. What was the average time in minutes it took for each driver to arrive at the Faasos HQ to pick the order?

```
select driver_id, round(AVG(time_to_reach_HQ), 2) from (

select * from(

select *, row_number() over(partition by order_id order by time_to_reach_HQ) rnk from (

select customer_id,order_id,driver_id, abs(pick_time - order_time) as time_to_reach_HQ from

(
```

select a.order_id, a.customer_id, a.roll_id, a.not_include_items, a.extra_items_included, a.order_date ,b.driver_id,

b.pickup_time, b.distance, b.duration, b.cancellation,minute(a.order_date) as order_time, minute(b.pickup_time) as pick_time

from customer_orders a join driver_order b on a.order_id = b.order_id where b.pickup_time is not null)a)b)c where rnk = 1)D group by driver_id

12. Is there any relationship between the number of rolls and how long the order takes to prepare?

select order_id, count (roll_id), sum(diff)/count (roll_id) from

(select a.order_id, a.customer_id, a.roll_id, a.not_include_items, a.extra_items_included, a.order_date,

b.driver_id,b.pickup_time,b. distance, b.duration,b.cancellation, datediff(minute, a.order_date,b.pickup_time) diff

from customer_orders a inner join driver_order b on a.order_id=b.order_id

where b.pickup_time is not null)a

group by order_id

13. What was the average distance travelled for each customer?

select customer_id, round(sum(distance_km)/COUNT(customer_id),2) as Avg_distance from

(

select a.order_id, a.customer_id, a.roll_id, b.driver_id, CAST(REPLACE(REPLACE(b.distance, 'km', ''), ' ', '') AS FLOAT) AS distance_km, b.duration,

CASE WHEN B.cancellation IN ('Cancellation','Customer Cancellation') then 'C' else 'D' end as new_cancellation

from customer_orders a join driver_order b on a.order_id = b.order_id)a where new_cancellation = 'D' group by customer_id

14. What was the difference between the longest and shortest delivery times for all orders?

select max(duration)-min(duration) diff from

(

select cast(case when duration like '%min%' then left(duration,CHARINDEX('m',duration)-1) else duration end as integer)duration

from driver_order where duration is not null) A

15. What was the average speed for each driver for each delivery and do you notice any trend for these values? speed=d/t

select order_id, driver_id, distance/duration speed from

(select order_id, driver_id, cast (trim(replace(lower (distance), 'km',''')) as decimal (4,2)) distance ,cast(case when duration like '%min%' then left (duration, charindex('m', duration)-1) else

duration end as integer) as duration from driver_order where distance is not null)a;

16. What is the successful delivery percentage for each driver?

-- sdp total orders successfully delivered/ total orders taken

select driver_id, s*1.0/t cancelled_per from

(select driver_id, sum(can_per) s, count(driver_id) t from

(select driver_id, case when lower (cancellation) like '%cancel%' then 0 else 1 end as can_per from driver_order) a group by driver_id)b;