B. Runner and Customer Experience

1-How many runners signed up for each 1 week period? (i.e. week starts 2021-01-01)

SELECT COUNT(runner\_id) as num\_runner

, strftime('%W',registration\_date) AS registration\_week

FROM runners

GROUP BY strftime('%W', registration\_date)

;

SELECT EXTRACT (week FROM registration\_date) as weekly,

count(runner\_id) as num\_runners

FROM runners

GROUP BY 1;

-- 'W': This format code returns the week number within a month, where weeks start on Sunday.

-- It ranges from 1 to 5 (or less, depending on the number of weeks in the month).

-- 'IW': This format code returns the ISO week number, which is a standard way of representing weeks.

-- ISO weeks start on Monday, and the week number represents the week within the ISO year.

select registration\_date,

to\_char(registration\_date,'W') ,

to\_char(registration\_date + 3,'IW'),

EXTRACT(week from registration\_date),

EXTRACT(week from registration\_date + 3)

from runners

;

SELECT EXTRACT(week from registration\_date + 3),

count(runner\_id)

from runners

group by 1

order by 1

;

2-What was the average time, in minutes, it took for each runner, to arrive at the Pizza Runner HQ, to pickup the order?

select runner\_id,

avg(pickup\_time - order\_time)

from customer\_orders co

JOIN runner\_orders ro on ro.order\_id = co.order\_id

where cancellation is null

group by 1

;

3-Is there any relationship between the number of pizzas and how long the order takes to prepare?

select co.order\_id,

count (\*) as number\_of\_pizzas,

(pickup\_time - order\_time) as duration\_

from runner\_orders as ro

join customer\_orders as co on ro.order\_id=co.order\_id

where pickup\_time is not null

group by 1,3

order by co.order\_id,duration\_

;

4-What was the average distance travelled for each customer?

SELECT c.customer\_id,

CEIL(AVG(distance)) as avg\_distance\_km

FROM customer\_orders AS c

JOIN runner\_orders AS r

ON c.order\_id = r.order\_id

WHERE cancellation IS NULL

GROUP BY 1;

OR

SELECT customer\_id,

ROUND(avg(distance)) AS avg\_distance

FROM runner\_orders

INNER JOIN customer\_orders USING (order\_id)

WHERE cancellation IS NULL

GROUP BY customer\_id;

5-What was the difference between the longest and shortest delivery times for all orders?

SELECT MIN(duration) minimum\_duration,

MAX(duration) maximum\_duration,

MAX(duration) - MIN(duration) AS maximum\_difference

FROM runner\_orders;

6-What was the average speed, for each runner, for each delivery, and do you notice any trend for these values?

SELECT runner\_id,

distance AS distance\_km,

round(duration/60, 2) AS duration\_hr,

round(distance\*60 / duration) AS average\_speed

FROM runner\_orders

WHERE cancellation IS NULL

ORDER BY runner\_id;

7-What is the successful delivery percentage for each runner?

SELECT runner\_id,

ROUND (100 \* SUM (CASE WHEN cancellation IS NULL THEN 1 ELSE 0 END) / COUNT(\*)) AS success\_perc

FROM runner\_orders

GROUP BY runner\_id;

OR

SELECT runner\_id,

COUNT(pickup\_time) AS delivered\_orders,

COUNT(\*) AS total\_orders,

ROUND(100 \* COUNT(pickup\_time) / COUNT(\*)) AS delivery\_success\_percentage

FROM runner\_orders

GROUP BY runner\_id

ORDER BY runner\_id;

8- Is there any relationship between the number of pizzas and how long the order takes to prepare?

SELECT runner\_id,

COUNT(pickup\_time) pickup\_time,

COUNT(\*) total\_orders,

ROUND(100\* COUNT(pickup\_time) / COUNT(\*)) succ\_percent

FROM runner\_orders

GROUP BY 1

ORDER BY 1;