

ODUTAYO ODUFUWA

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PIZZA RUNNER

DANNY MA'S 8 WEEK SQL CHALLENGE- CASE STUDY 2





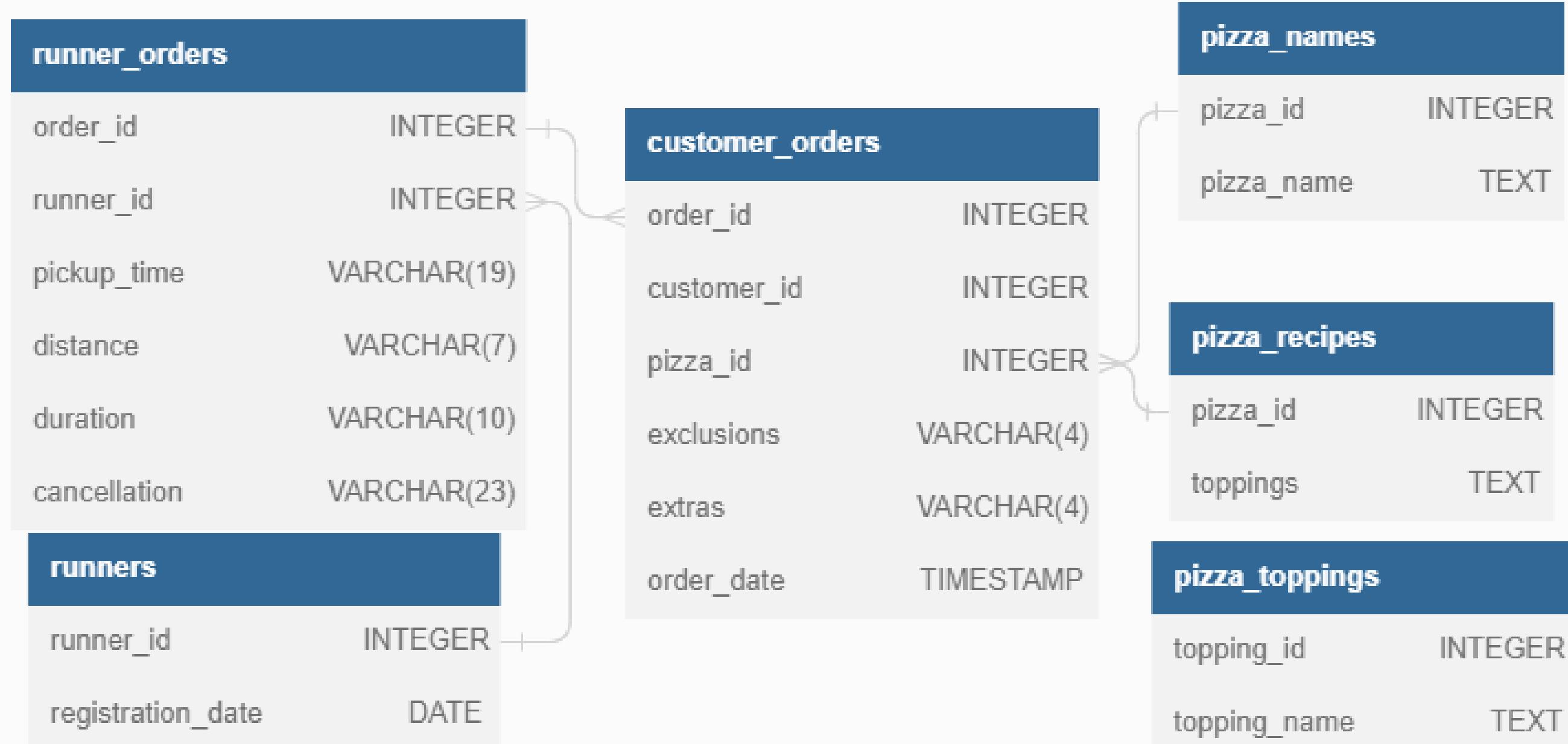
CASE STUDY SUMMARY

This case study contains a database (pizza_runner) with 6 tables:

- Runners
- Customer_Orders
- Runner_Orders
- Pizza_Names
- Pizza_Recipes
- Pizza_Toppings

[FULL DETAILS OF CASE STUDY CAN BE FOUND HERE](#)

ENTITY RELATIONSHIP DIAGRAM



dbdiagram.io

SOME DATA CLEANING QUERIES

```
-- The query below changes blank cells and cells equal to "null" in  
-- the exclusions and extras columns found in the customer orders  
-- table to NULL
```

```
UPDATE customer_orders  
SET exclusions = NULL  
WHERE exclusions = "null" OR exclusions = "";
```

```
UPDATE customer_orders  
SET extras = NULL  
WHERE extras = "null" OR extras = "";
```

```
-- The query below changes blank cells and cells equal to "null" in  
-- the pickup_time, distance, duration, and cancellation columns found  
-- in the runner_orders table to NULL
```

```
UPDATE runner_orders  
SET pickup_time = NULL  
WHERE pickup_time = "null" OR pickup_time = "";
```

```
UPDATE runner_orders  
SET distance = NULL  
WHERE distance = "null" OR distance = "";
```

```
UPDATE runner_orders  
SET duration = NULL  
WHERE duration = "null" OR duration = "";
```

```
UPDATE runner_orders  
SET cancellation = NULL  
WHERE cancellation = "null" OR cancellation = "";
```

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Answers to Pizza Metrics questions

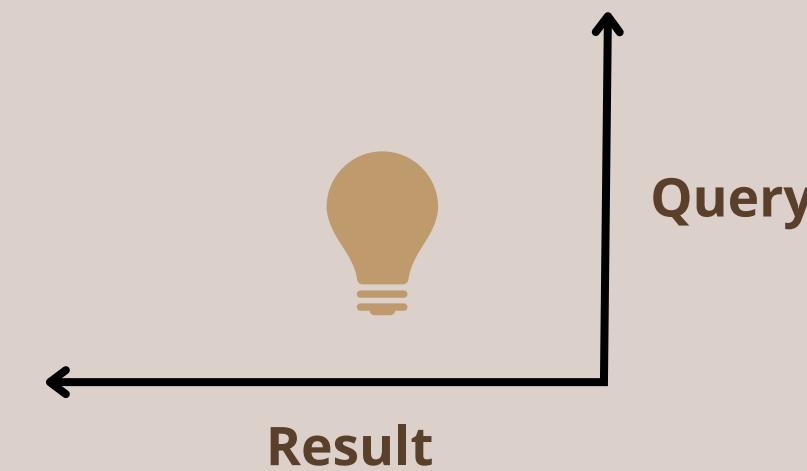


Question 1

How many pizzas were ordered?

```
SELECT COUNT(pizza_id) AS pizza_ordered_count  
FROM pizza_runner.customer_orders;
```

Result Grid		Filter
	pizza_ordered_count	
▶	14	



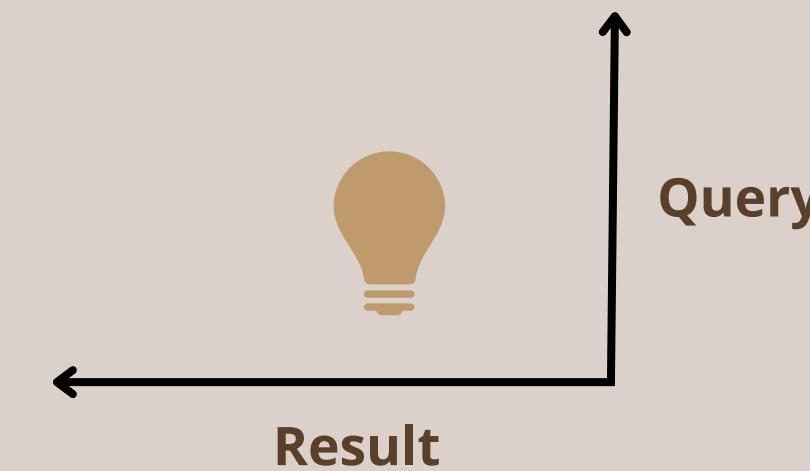


Question 2

How many unique customer orders were made?

```
SELECT COUNT(DISTINCT customer_id) AS unique_customer_count  
FROM pizza_runner.customer_orders;
```

Result Grid		Filter Row
unique_customer_count		
5		





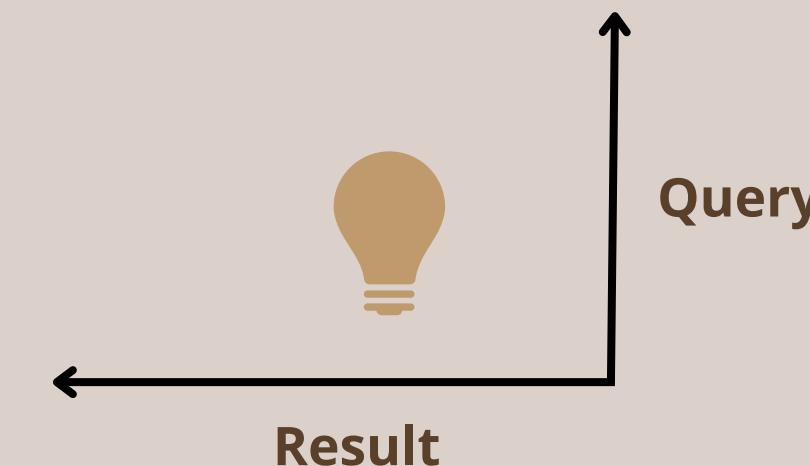
Question 3

How many successful orders were delivered by each runner?

```
SELECT runner_id, COUNT(*) AS count_of_successful_orders  
FROM pizza_runner.runner_orders  
WHERE cancellation IS NULL  
GROUP BY runner_id;
```

Result Grid | Filter Rows:

	runner_id	count_of_successful_orders
▶	1	4
	2	3
	3	1





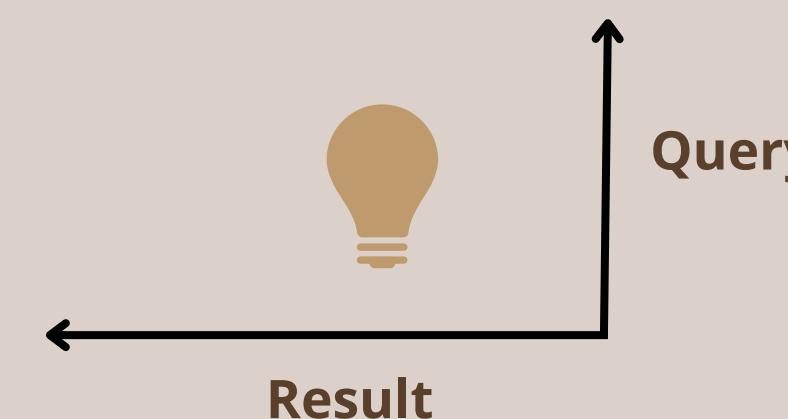
Question 4

How many of each type of pizza was delivered?

```
SELECT n.pizza_name, COUNT(*) AS count_of_deliveries
FROM pizza_runner.runner_orders ro
JOIN pizza_runner.customer_orders co
USING (order_id)
JOIN pizza_runner.pizza_names n
ON n.pizza_id = co.pizza_id
WHERE cancellation IS NULL
GROUP BY n.pizza_name;
```

Result Grid | Filter Rows:

	pizza_name	count_of_deliveries
▶	Meatlovers	9
	Vegetarian	3





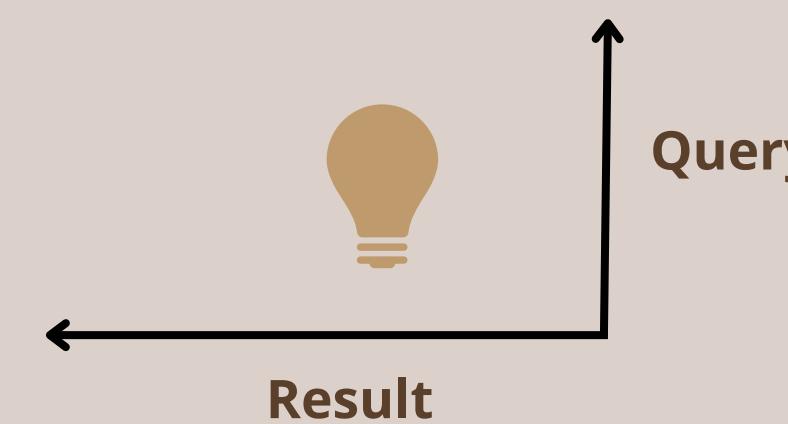
Question 5

How many Vegetarian and Meatlovers were ordered by each customer?

```
SELECT co.customer_id,
       COUNT(IF(co.pizza_id = 1, 1, NULL)) AS meatlovers_pizza_count,
       COUNT(IF(co.pizza_id = 2, 1, NULL)) AS vegetarian_pizza_count
  FROM pizza_runner.customer_orders co
 JOIN pizza_runner.pizza_names n
    ON n.pizza_id = co.pizza_id
 GROUP BY co.customer_id;
```

Result Grid | Filter Rows: Export:

	customer_id	meatlovers_pizza_count	vegetarian_pizza_count
▶	101	2	1
	102	2	1
	103	3	1
	104	3	0
	105	0	1



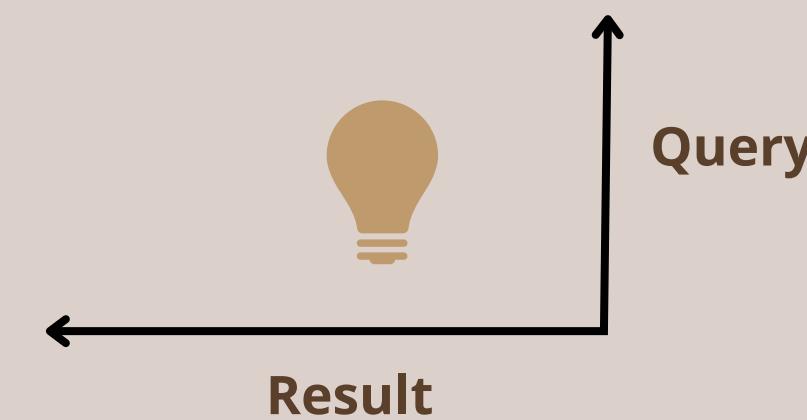


Question 6

What was the maximum number of pizzas delivered in a single order?

```
SELECT MAX(pizza_delivery_count) AS MaxPizzaDelivered
FROM
  (SELECT co.order_id, COUNT(pizza_id) AS pizza_delivery_count
  FROM pizza_runner.customer_orders co
  JOIN pizza_runner.runner_orders ro
  ON ro.order_id = co.order_id
  WHERE ro.cancellation IS NULL
  GROUP BY co.order_id) x;
```

Result Grid					Filter
MaxPizzaDelivered					
	3				



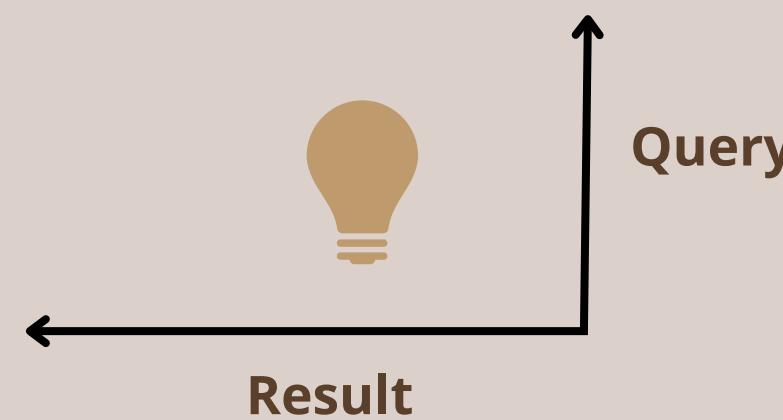


Question 7

For each customer, how many delivered pizzas had at least 1 change and how many had no changes?

```
SELECT co.customer_id,
       COUNT(IF((co.exclusions IS NOT NULL OR co.extras IS NOT NULL), 1, NULL)) AS atleast_one_change_in_pizza,
       COUNT(IF((co.exclusions IS NULL AND co.extras IS NULL), 1, NULL)) AS no_change_in_pizza
  FROM pizza_runner.customer_orders co
  JOIN pizza_runner.runner_orders ro
    ON ro.order_id = co.order_id
   WHERE ro.cancellation IS NULL
 GROUP BY co.customer_id;
```

	customer_id	atleast_one_change_in_pizza	no_change_in_pizza
▶	101	0	2
▶	102	0	3
▶	103	3	0
▶	104	2	1
▶	105	1	0



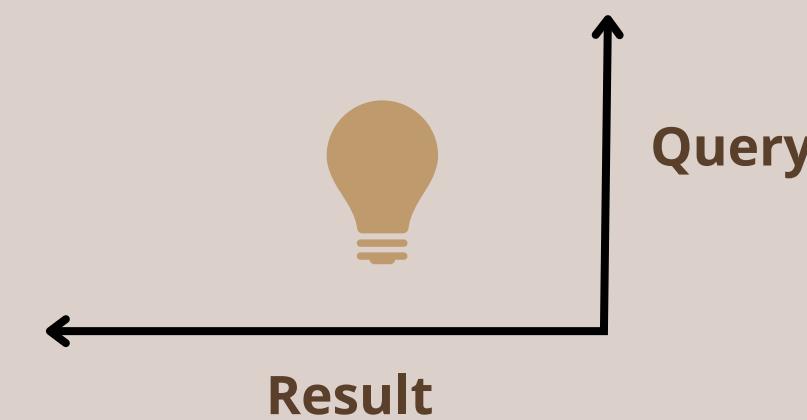


Question 8

How many pizzas were delivered that had both exclusions and extras?

```
SELECT COUNT(IF((co.exclusions IS NOT NULL AND co.extras IS NOT NULL), 1, NULL))
AS count_of_pizza_delivered_with_exclusions_and_extras
FROM pizza_runner.customer_orders co
JOIN pizza_runner.runner_orders ro
ON ro.order_id = co.order_id
WHERE ro.cancellation IS NULL;
```

Result Grid				Filter Rows:	<input type="text"/>	Export:
count_of_pizza_delivered_with_exclusions_and_extras						
	1					





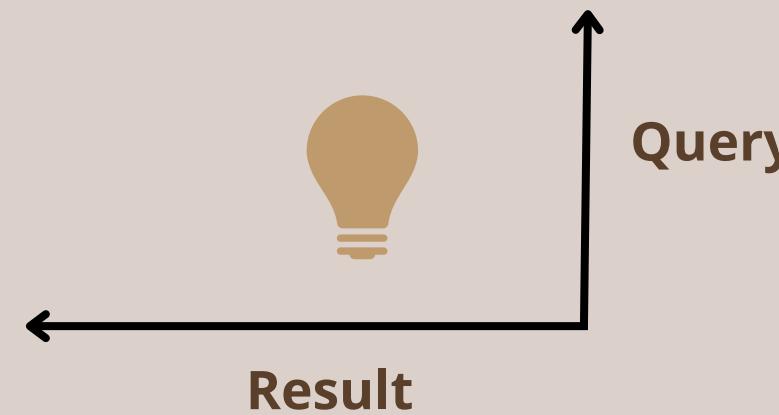
Question 9

What was the total volume of pizzas ordered for each hour of the day?

```
SELECT CASE
    WHEN hour(order_time) NOT BETWEEN 11 AND 19
    THEN CASE
        WHEN RIGHT(hour(order_time),1) = 1 THEN CONCAT(hour(order_time),"st hour")
        WHEN RIGHT(hour(order_time),1) = 2 THEN CONCAT(hour(order_time),"nd hour")
        WHEN RIGHT(hour(order_time),1) = 3 THEN CONCAT(hour(order_time),"rd hour")
    END
    ELSE CONCAT(hour(order_time),"th hour")
    END AS hour_of_the_day,
    COUNT(pizza_id) AS total_volumes_of_pizza_ordered
FROM pizza_runner.customer_orders
GROUP BY hour_of_the_day;
```

Result Grid | Filter Rows: | Export

	hour_of_the_day	total_volumes_of_pizza_ordered
▶	18th hour	3
	19th hour	1
	23rd hour	3
	13th hour	3
	21st hour	3
	11th hour	1





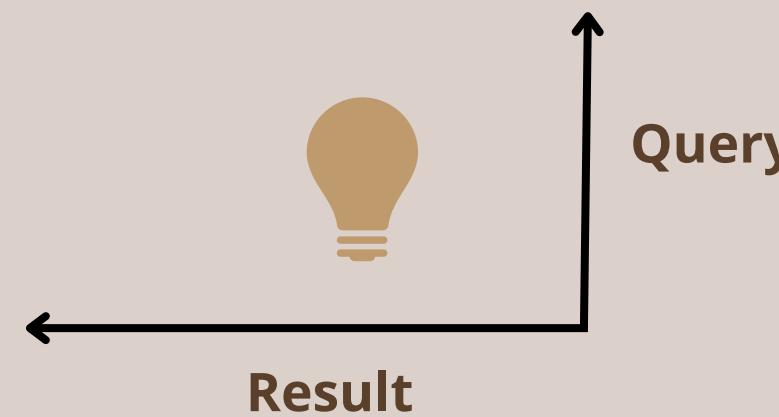
Question 10

What was the volume of orders for each day of the week?

```
SELECT dayname(order_time) AS day_of_the_week,  
       COUNT(pizza_id) AS total_volumes_of_pizza_ordered  
  FROM pizza_runner.customer_orders  
 GROUP BY day_of_the_week  
 ORDER BY weekday(order_time);
```

Result Grid | Filter Rows: Exp

	day_of_the_week	total_volumes_of_pizza_ordered
▶	Wednesday	5
	Thursday	3
	Friday	1
	Saturday	5



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*See my [GitHub Repository](#) for answers to
Runner and Customer experience questions*

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*See my [GitHub Repository](#) for answers to
Ingredient Optimization questions*

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*See my [GitHub Repository](#) for answers to
Pricing and Ratings questions*

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*See my [GitHub Repository](#) for answers to
Bonus questions*

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THANK YOU

