

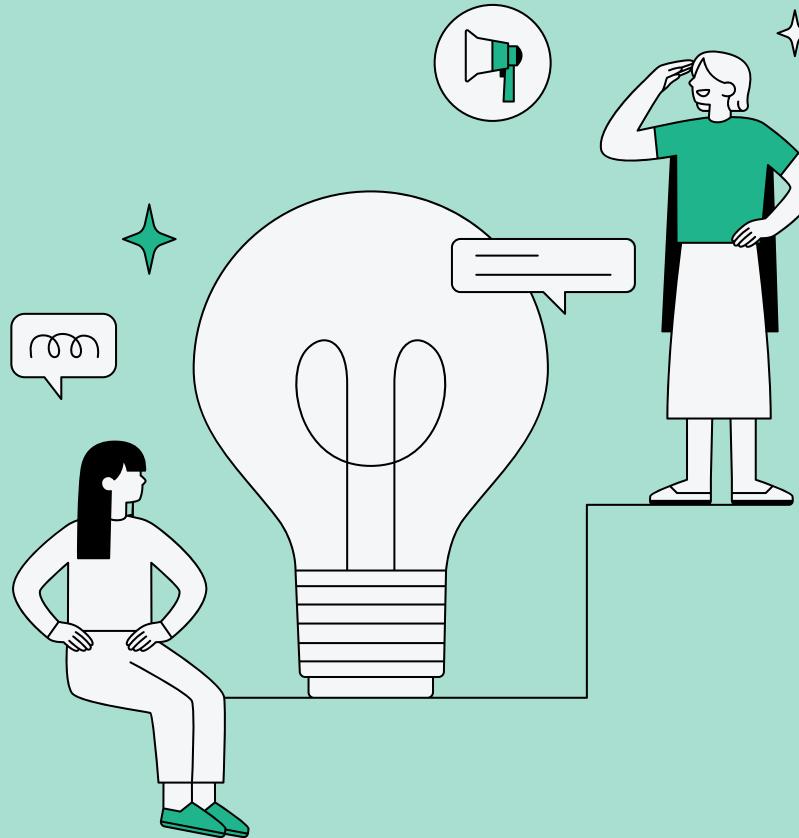
Presented by Ankush Waghmare

# Pizza Sales Analysis

Using MySql

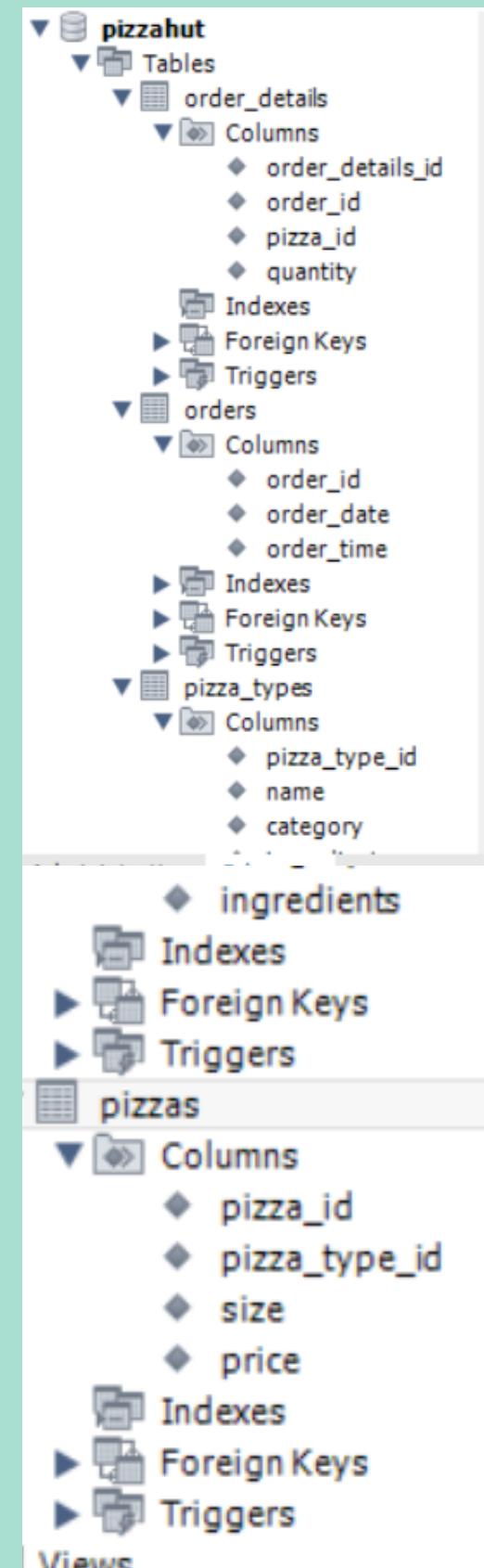


# Introduction to results analysis



I have completed this project by using MySQL it represents the sales data in structured way there are 4 tables which are internally connected each others by using joins and other sql concepts

## Data base and table Struthers



# Retrieve the total number of orders placed

```
SELECT  
    COUNT(order_id) AS total_orders  
FROM  
    orders
```

Result Grid	
	total_orders
▶	21350



# Calculate the total revenue generated from pizza sales

```
SELECT  
    ROUND(SUM(pz.price * od.quantity), 2) AS total_revenue  
FROM  
    order_details od  
        JOIN  
    pizzas pz ON od.pizza_id = pz.pizza_id
```

	total_revenue
▶	817860.05

# Identify the highest-priced pizza

```
SELECT
    pizza_types.name, pizzas.price
FROM
    pizzas
        JOIN
    pizza_types
        ON pizzas.pizza_type_id = pizza_types.pizza_type_id
ORDER BY pizzas.price DESC
LIMIT 1
```

Result Grid | Filter Row

	name	price
▶	The Greek Pizza	35.95

# Identify the most common pizza size ordered

```
SELECT  
    pizzas.size,  
    COUNT(order_details.order_id) AS common_pizza_order  
FROM  
    order_details  
        JOIN  
    pizzas ON order_details.pizza_id = pizzas.pizza_id  
GROUP BY pizzas.size  
ORDER BY common_pizza_order desc limit 1;
```



Result Grid | Filter Rows:

	size	common_pizza_order
▶	L	18526

# List the top 5 most ordered pizza types along with their quantities

```
SELECT
    pizza_types.name, SUM(order_details.quantity) AS quantities
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY quantities DESC
LIMIT 5
```

	name	quantities
▶	The Classic Deluxe Pizza	2453
	The Barbecue Chicken Pizza	2432
	The Hawaiian Pizza	2422
	The Pepperoni Pizza	2418
	The Thai Chicken Pizza	2371

# Join the necessary tables to find the total quantity of each pizza category ordered

```
SELECT
    SUM(order_details.quantity) AS ordered_total_quantity,
    pizza_types.category
FROM
    pizza_types
    JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY ordered_total_quantity DESC
```

	ordered_total_quantity	category
▶	14888	Classic
	11987	Supreme
	11649	Veggie
	11050	Chicken

# Determine the distribution of orders by hour of the day

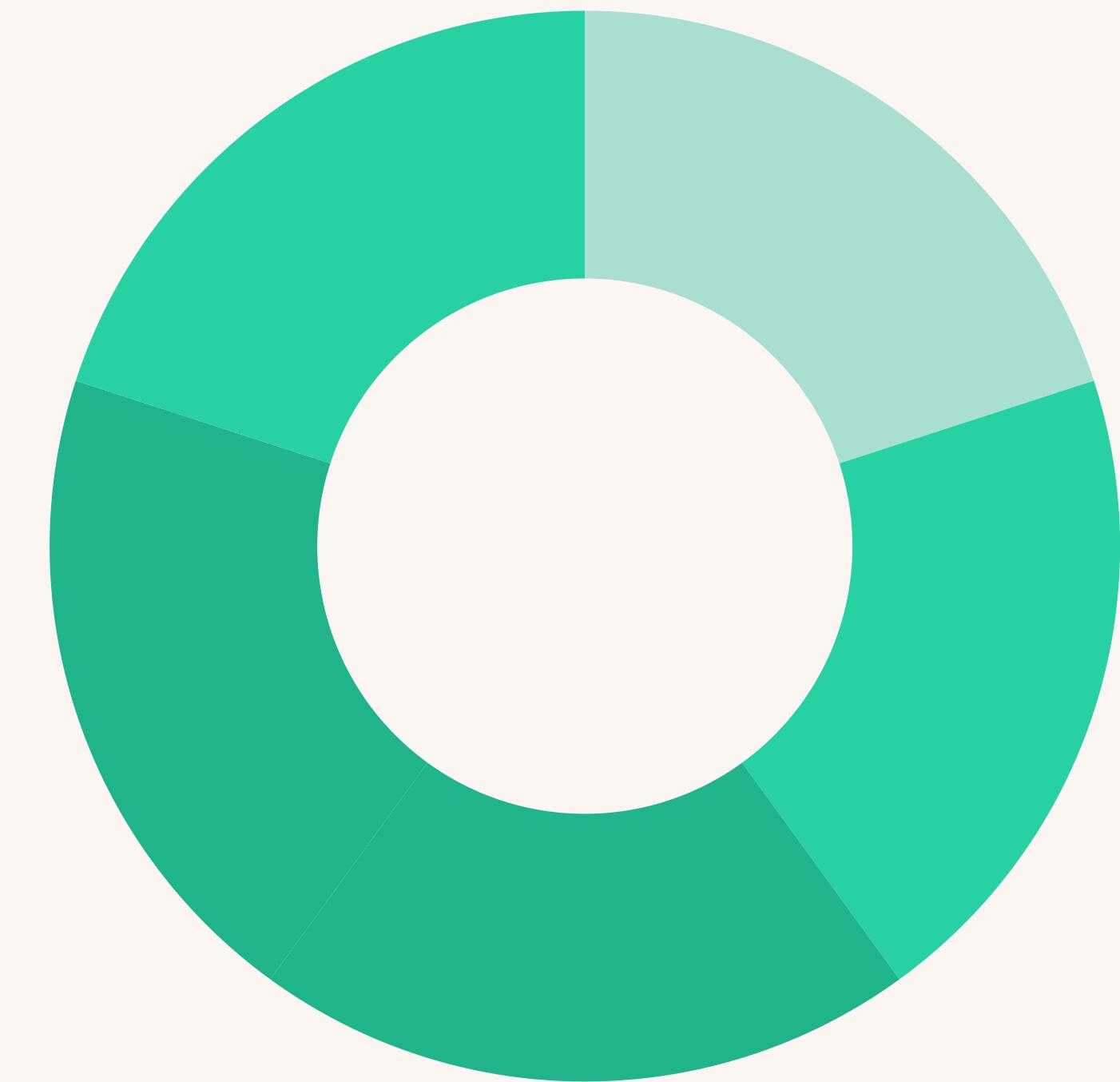
```
SELECT  
    HOUR(orders.order_time) AS hours, COUNT(orders.order_id) as order_id  
FROM  
    orders  
GROUP BY hours
```

	hours	order_id
▶	11	1231
	12	2520
	13	2455
	14	1472
	15	1468
	16	1920
	17	2336
	18	2399
	19	2009
	20	1642



Join relevant tables to find the category-wise distribution of pizzas

```
SELECT  
    category, COUNT(name)  
FROM  
    pizza_types  
GROUP BY category;
```



Result Grid		
	category	count(name)
	Chicken	6
	Classic	8
	Supreme	9
▶	Veggie	9

Group the orders by date and calculate the average number of pizzas ordered per day

```
SELECT  
    ROUND(AVG(quantity), 2)  
FROM  
    (SELECT  
        DATE(orders.order_date) AS order_date,  
        SUM(order_details.quantity) AS quantity  
    FROM  
        orders  
    JOIN order_details ON orders.order_id = order_details.order_id  
    GROUP BY order_date) AS order_quantity;
```

Result Grid	
	round(avg(quantity),2)
▶	138.47

# Determine the top 3 most ordered pizza types based on revenue

```
SELECT
    pizza_types.name,
    SUM(pizzas.price * order_details.quantity) AS revenue
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY revenue DESC
LIMIT 3
```



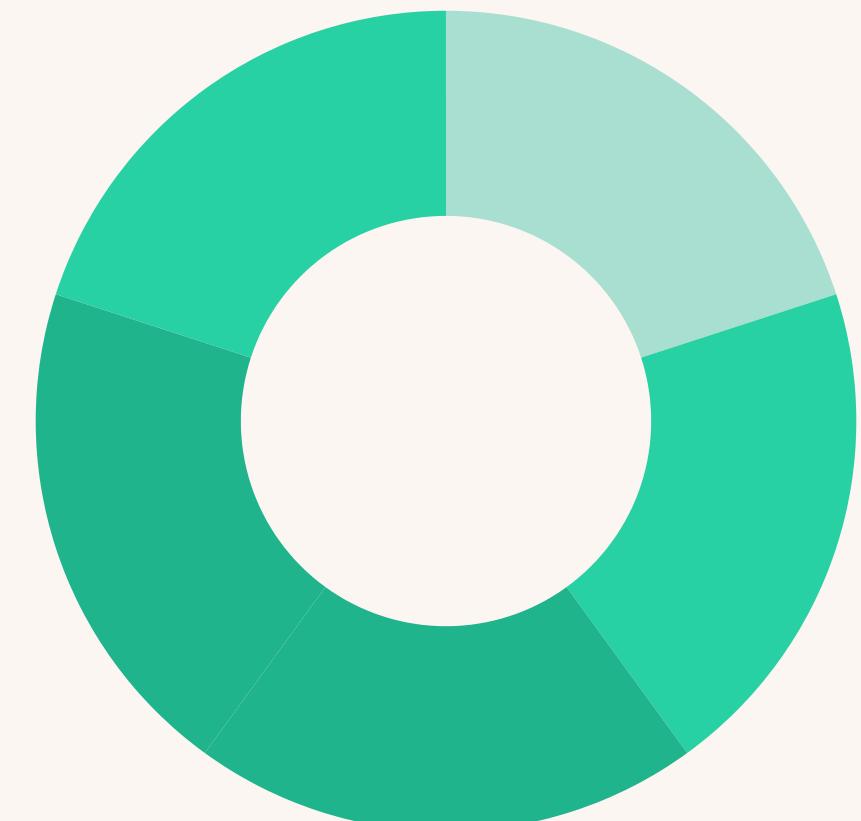
Result Grid | Filter Rows:

	name	revenue
▶	The Thai Chicken Pizza	43434.25
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41409.5

# calculate the percentage contribution of each pizza type to total revenue.

```
SELECT
    pizza_types.category,
    concat(ROUND(SUM(pizzas.price * order_details.quantity) / (SELECT
        SUM(pizzas.price * order_details.quantity) AS total_revenue
    FROM
        order_details
    JOIN
        pizzas ON order_details.pizza_id = pizzas.pizza_id) * 100,
    2), "%") AS revenue
FROM
    pizza_types
    JOIN
        pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
        order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizza_types.category
ORDER BY revenue DESC
```

Result Grid		Filter Rows:
	category	revenue
▶	Classic	26.91%
	Supreme	25.46%
	Chicken	23.96%
	Veggie	23.68%



# Analyze the cumulative revenue generated over time

```
select order_date,  
sum(revenue) over(order by order_date) as cum_revenue from  
(select orders.order_date,  
sum(order_details.quantity * pizzas.price) as revenue  
from order_details join pizzas  
on order_details.pizza_id = pizzas.pizza_id  
join orders on orders.order_id = order_details.order_id  
group by orders.order_date) as sales
```

	order_date	cum_revenue
▶	2015-01-01	2713.850000000004
	2015-01-02	5445.75
	2015-01-03	8108.15
	2015-01-04	9863.6
	2015-01-05	11929.55
	2015-01-06	14358.5
	2015-01-07	16560.7
	2015-01-08	19399.05
	2015-01-09	21526.4
	2015-01-10	23000.250000000003

# Determine the top 3 most ordered pizza types based on revenue for each pizza category

```
select name, category, rn from
(select category, name, revenue,
rank() over(partition by category order by revenue desc) as rn from
(select pizza_types.category, pizza_types.name,
sum((order_details.quantity)* pizzas.price) as revenue
from pizza_types join pizzas
on pizza_types.pizza_type_id = pizzas.pizza_type_id
join order_details on order_details.pizza_id = pizzas.pizza_id
group by pizza_types.category, pizza_types.name) as a) as b
where rn < 3;
```



	name	category	rn
	The Thai Chicken Pizza	Chicken	1
	The Barbecue Chicken Pizza	Chicken	2
	The Classic Deluxe Pizza	Classic	1
	The Hawaiian Pizza	Classic	2
	The Spicy Italian Pizza	Supreme	1
▶	The Italian Supreme Pizza	Supreme	2
	The Four Cheese Pizza	Veggie	1
	The Mexicana Pizza	Veggie	2

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# Thank you very much!

