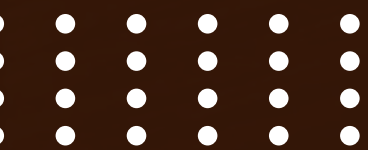# HELLOW

MY NAME IS JAYSHREE BADGUJAR

In this project, I have utilized SQL to solve queries related to pizza sales. This project focuses on analyzing sales data using various SQL queries to extract meaningful insights and support business decisions.

PIZZA SALES PROJECT - DATABASE

customers (customer_id, customer_name, email, phone, address)

orders (order_id, customer_id, order_date, order_time, total_amount)

pizzas (pizza_id, pizza_name, category, size, price)

order_details (order_detail_id, order_id, pizza_id, quantity)

RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED

- **QUERIES**

```sql
select count(order_id) from orders ;
select count(order_id) as total_orders from orders ;
```

- **OUTPUT**

Result Grid	
	total_orders
▶	21350

IDENTIFY THE HIGHEST-PRICED PIZZA

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

name	price
▶ The Greek Pizza	35.95

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED

```sql
SELECT
    quantity, COUNT(order_details_id)
FROM
    orders_details
GROUP BY quantity;


SELECT
    pizzas.size,
    COUNT(orders_details.order_details_id) AS order_count
FROM
    pizzas
        JOIN
    orders_details ON pizzas.pizza_id = orders_details.pizz
GROUP BY pizzas.size
ORDER BY order_count DESC;
```

size	order_count
L	18526
M	15385
S	14137
XL	544
XXL	28

LIIS THE TOP 5 ORDERED PIZZ TYPES ALONG WITH THEIR QUANTITIES

```sql
SELECT
    pizza_types.name, SUM(orders_details.quantity) As quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT 5;
```

	name	quantity
▶	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

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

	category	quantity
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

```sql
select* from orders;

select hour(order_time)from orders;


SELECT
    HOUR(order_time) AS hour, COUNT(order_id) AS order_count
FROM
    orders
GROUP BY HOUR(order_time);
```

hour	order_count
11	1231
12	2 1231
13	2455
14	1472
15	1468
16	1920
17	2336
18	2399
19	2009
20	1642
21	1198
22	663
23	28
10	8
9	1

JOIN RELEVANT TABLES TO FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS.

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

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

GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZS ORDERED PER DAY.

```sql
SELECT
    ROUND(AVG(quantity), 0) as avg_pizza_ordered_per_day
FROM
    (SELECT
        orders.order_date, SUM(orders_details.quantity) AS quantity
    FROM
        orders
    JOIN orders_details ON orders.order_id = orders_details.order_id
    GROUP BY orders.order_date) AS order_quantity;
```

avg_pizza_ordered_per_day
138

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE.

CALULATE THE PERCENTAGE CONTRIBUTION OF EACH
PIZZA TYPE TO TOTAL REVENUE .

```sql
select pizza_types.name,
       sum(orders_details.quantity * pizzas.price) as revenue
from pizza_types
join pizzas
  on pizzas.pizza_type_id = pizza_types.pizza_type_id
join orders_details
  on orders_details.pizza_id = pizzas.pizza_id
group by pizza_types.name
order by revenue desc
limit 3;
```

```sql
select pizza_types.category,
       (sum(orders_details.quantity * pizzas.price) * 100 /
          (select round(sum(orders_details.quantity * pizzas.price), 2)
            from pizzas
            join orders_details on orders_details.pizza_id = pizzas.pizza_id)
       ) as revenue_percentage
from pizza_types
join pizzas on pizza_types.pizza_type_id = pizzas.pizza_type_id
join orders_details on orders_details.pizza_id = pizzas.pizza_id
group by pizza_types.category
order by revenue_percentage desc;
```

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

category	revenue_percentage
Classic	26.905960255669665
Supreme	25.45631126009862
Chicken	23.955137556847287
Veggie	23.682590927384577

ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.

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

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY.

```sql
select name, revenue from
(SELECT
    sub.category,
    sub.name,
    sub.revenue,
    RANK() OVER(PARTITION BY sub.category ORDER BY sub.revenue DESC) AS rn
FROM (
    SELECT
        pizza_types.category AS category,
        pizza_types.name AS name,
        SUM(orders_details.quantity * pizzas.price) AS revenue
    FROM pizza_types
    JOIN pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN orders_details ON orders_details.pizza_id = pizzas.pizza_id
    GROUP BY pizza_types.category, pizza_types.name
```

Result Grid | Filter Rows:

name	revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5
The Classic Deluxe Pizza	38180.5
The Hawaiian Pizza	32273.25
The Pepperoni Pizza	30161.75
The Spicy Italian Pizza	34831.25
The Italian Supreme Pizza	33476.75
The Sicilian Pizza	30940.5
The Four Cheese Pizza	32265.70000000065
The Mexicana Pizza	26780.75
The Five Cheese Pizza	26066.5