



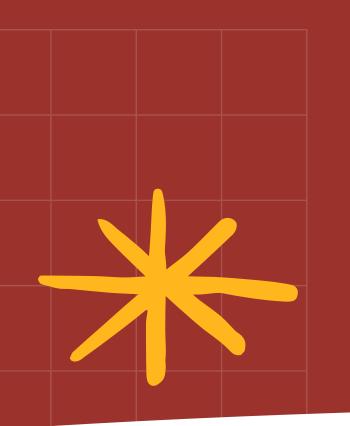
This SQL project on sales pizza reports aims to leverage data analysis techiques to extract valuable insights from a database, enabling stakeholders to make informed decisions and drive business growth in the competitive pizza industry. By solving a series of progressively complex queries, the project aims to understand sales patterns, revenue generation, and customer preferences, which can help in making data-driven decisions for business improvements.



Q1. RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.



select count(order_id)as total_orders from orders;











Q2. CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.ORDERS_DETAILS

```
SELECT

ROUND(SUM(orders_details.quantity * pizzas.price),

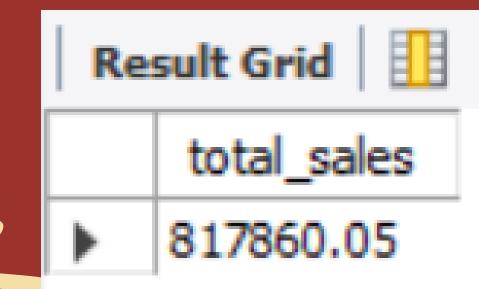
2) AS total_sales

FROM

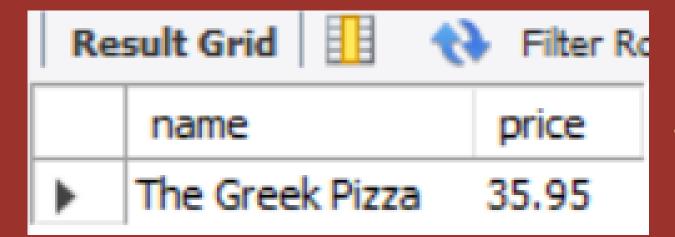
orders_details

JOIN

pizzas ON pizzas.pizza_id = orders_details.pizza_id
```



Q3. IDENTIFY THE HIGHEST-PRICED PIZZA.

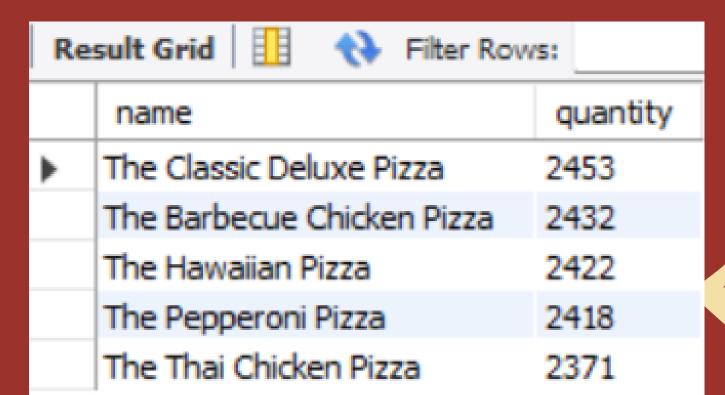


Q4. IOENTIFY THE MOST COMMON PIZZA SIZE OROEREO.

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

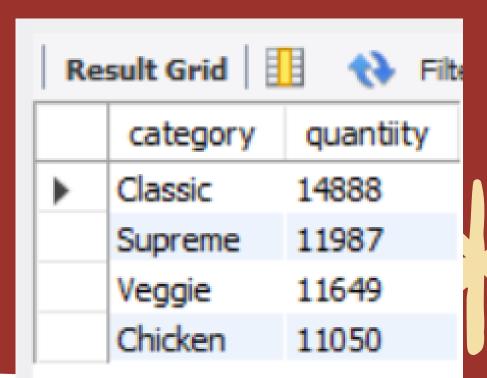
QS. LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES.

```
SELECT
    pizza_types.name, SUM(orders_details.quantity) A5 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;
```



Q6. JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED.

```
SELECT
    pizza_types.category,
    SUM(orders details.quantity) A5 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 quantiity desc;
```



Q7. DETERMINE THE DISTRIBUTION OF DROERS BY HOUR OF THE DAY.

```
SELECT

HOUR(order_time) AS Hour, COUNT(order_id) AS order_count

FROM

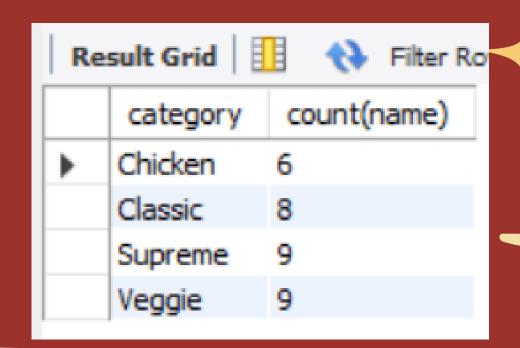
orders

GROUP BY HOUR(order_time)
```

Re	sult Grid	I ∰ ♦♦ Fil
	Hour	order_count
>	11	1231
	12	2520
	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

Q8. JOIN RELEVANT TABLES TO FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS.

select category, count(name) from pizza_types
group by category;



Q9. GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAG NUMBER OF PIZZAS ORDERED PER DAY.

```
SELECT
   ROUND(AVG(quantity),0) as avg_pizza_ordered_perday
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;
```



Result Grid H Filter Row

avg_pizza_ordered_perday



Q10. DETERMINE THE TOP 3 MOST DROERED PIZZA THRES BASED ON REVENUE.

```
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;
```





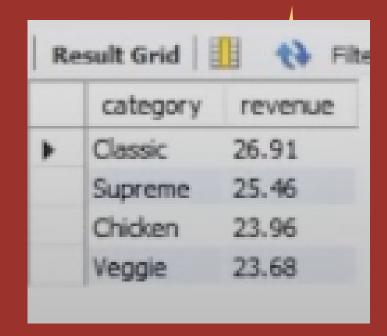
Result Grid				
	name	revenue		
•	The Thai Chicken Pizza	43434.25		
	The Barbecue Chicken Pizza	42768		
	The California Chicken Pizza	41409.5		

Q11. CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE.

```
SELECT
    pizza_types.category,
    ROUND(SUM(orders_details.quantity * pizzas.price) / (SELECT
                    ROUND(SUM(orders_details.quantity * pizzas.price),
                                2) AS total sales
                FROM
                    orders_details
                        JOIN
                    pizzas ON pizzas.pizza_id = order_details.pizza_id) * 100,
            2) 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
```

ORDER BY revenue DESC;





Q12. DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY.

```
select name, revenue 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(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
                                                                                                          Filter Rows:
                                                                                            Result Grid
   on orders_details.pizza_id = pizzas.pizza_id
                                                                                               name
                                                                                                                     revenue
                                                                                               The Thai Chicken Pizza
                                                                                                                     43434.25
   group by pizza_types.category,pizza_types.name) as a) as b
                                                                                               The Barbecue Chicken Pizza
                                                                                                                     42768
   where rn <= 3;
                                                                                               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

Q13. 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(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_id
group by orders.order_date) as sales;
```

Result Grid	Name of the Filter Rows:
order_date	cum_revenue
2015-01-20	45763.65000000001
2015-01-21	47804.20000000001
2015-01-22	50300.90000000001
2015-01-23	52724.6000000000006
2015-01-24	55013.850000000006
2015-01-25	56631.40000000001
2015-01-26	58515.80000000001
2015-01-27	61043.85000000001
2015-01-28	63059.85000000001
2015-01-29	65105.150000000016
2015-01-30	67375.45000000001
2015-01-31	69793.30000000002
2015-02-01	72982.50000000001
2015-02-02	75311.10000000002
2015-02-03	77925.90000000002
2015-02-04	80159.80000000002
2015-02-05	82375.60000000002
2015-02-06	84885.55000000002
2015-02-07	87123.20000000001

