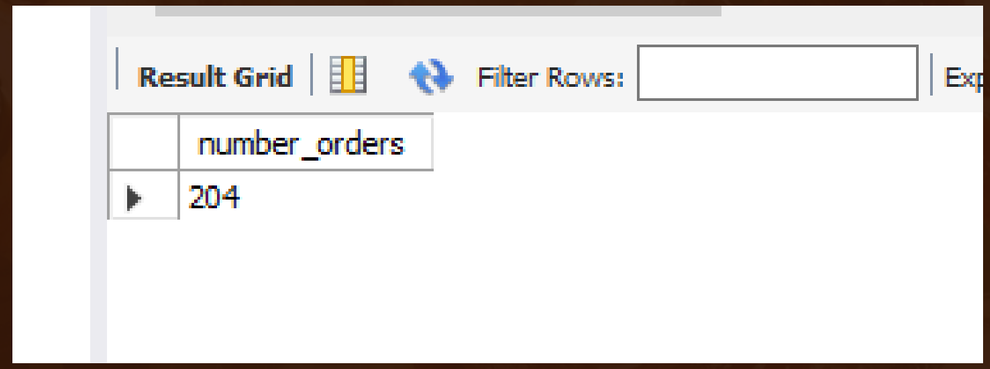
SQL PROJECT :
ANALYSIS ON PIZZA SALES

HELLO !

Hi, I am Urvashi Shasne. I utilized SQL queries to analyze and solve problems related to pizza sales in this project.

Retrieve the total number of orders placed.

```
SELECT
    COUNT(order_id) AS number_orders
FROM
    orders;
```



Calculate Total revenue generated from pizza sales and round it to 2 decimal places

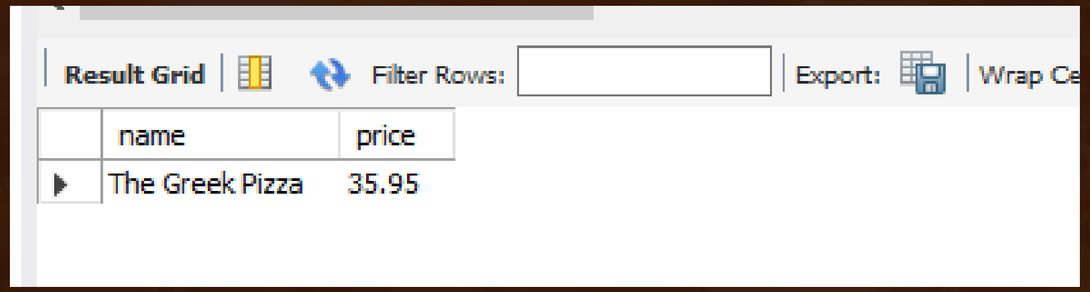
```sql
SELECT
    ROUND(SUM(order_details.quantity * pizzas.price),
            2) AS total_sales
FROM
    order_details
        JOIN
    pizzas ON order_details.pizza_id = pizzas.pizza_id;
```

Result Grid | Filter Rows: | Export:

total_sales
379190.9

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 price DESC
LIMIT 1;
```



name	price
The Greek Pizza	35.95

Identify the most commonly ordered pizza size

```sql
SELECT
    pizzas.size,
    COUNT(order_details.order_details_id) AS total_order
FROM
    pizzas
        JOIN
    order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizzas.size
ORDER BY total_order DESC;
```

Result Grid | Filter Rows: | Exp

size	total_order
L	8623
M	7113
S	6500
XL	269
XXL	15

pizzas which is ordered most along with their quantity

```sql
SELECT
    pizza_types.name, SUM(order_details.quantity) AS quantity
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 quantity
LIMIT 5;
```

Result Grid | Filter Rows: | Expo

name	quantity
The Brie Carre Pizza	221
The Mediterranean Pizza	420
The Calabrese Pizza	428
The Spinach Pesto Pizza	441
The Chicken Pesto Pizza	442

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

```sql
SELECT
    pizza_types.category,
    SUM(order_details.quantity) AS total_quantity
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;
```

Result Grid | Filter Rows:

category	total_quantity
Classic	6838
Veggie	5483
Supreme	5568
Chicken	5070

Determine the distribution of orders by hour of the day.

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

Result Grid | Filter Rows:

hour	no_orders
11	11
12	18
13	18
14	15
15	20
16	15
17	24
18	27
19	17
20	16
21	12
22	11

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

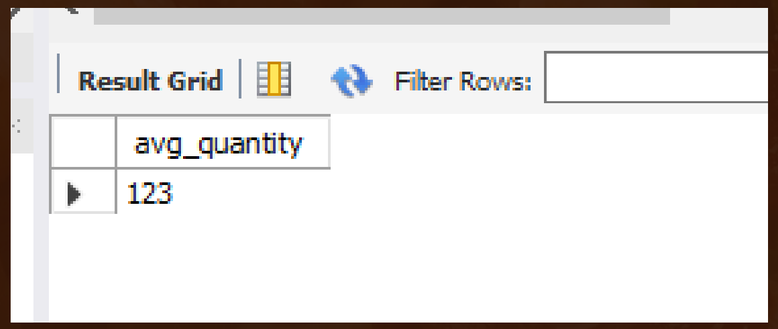
```sql
select * from pizza_types;
select category , count(name) from pizza_types
group by category;
```

Result Grid | Filter Rows: | Export:

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.

```sql
SELECT
    ROUND(AVG(quantity), 0) AS avg_quantity
FROM
    (SELECT
        SUM(order_details.quantity) AS quantity, orders.order_date
    FROM
        orders
    JOIN order_details ON orders.order_id = order_details.order_id
    GROUP BY orders.order_date) AS A;
```



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

```sql
SELECT
    pizza_types.name,
    SUM(order_details.quantity * pizzas.price) AS revenue
FROM
    pizza_types
        JOIN
    pizzas ON pizzas.pizza_type_id = pizza_types.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 Barbecue Chicken Pizza	20693.25
The Thai Chicken Pizza	19242.5
The California Chicken Pizza	18932.5

Calculate the percentage contribution of each pizza type to total revenue.

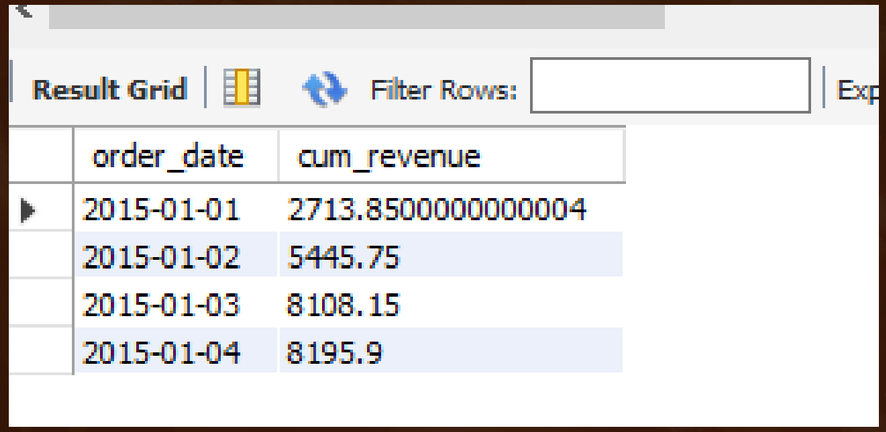
```sql
SELECT
    pizza_types.category,
    (SUM(order_details.quantity * pizzas.price) / (SELECT
            SUM(order_details.quantity * pizzas.price)
        FROM
            order_details
                JOIN
            pizzas ON order_details.pizza_id = pizzas.pizza_id) * 100) AS total_revenue
FROM
    pizza_types
        JOIN
    pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY total_revenue DESC;
```

Result Grid | Filter Rows:

category	total_revenue
Classic	26.688799757588743
Supreme	25.53467132254451
Veggie	24.04112282230342
Chicken	23.735406097561615

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(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	2713.8500000000004
2015-01-02	5445.75
2015-01-03	8108.15
2015-01-04	8195.9

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

```sql
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((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;
```

Result Grid | Filter Rows: | Expo

name	revenue
The Barbecue Chicken Pizza	20693.25
The Thai Chicken Pizza	19242.5
The California Chicken Pizza	18932.5
The Classic Deluxe Pizza	17038
The Hawaiian Pizza	14793.25
The Pepperoni Pizza	14011.5
The Spicy Italian Pizza	16121.5
The Italian Supreme Pizza	15907.75
The Sicilian Pizza	14155
The Four Cheese Pizza	15481.500000000151
The Five Cheese Pizza	12395
The Mexicana Pizza	12196.5