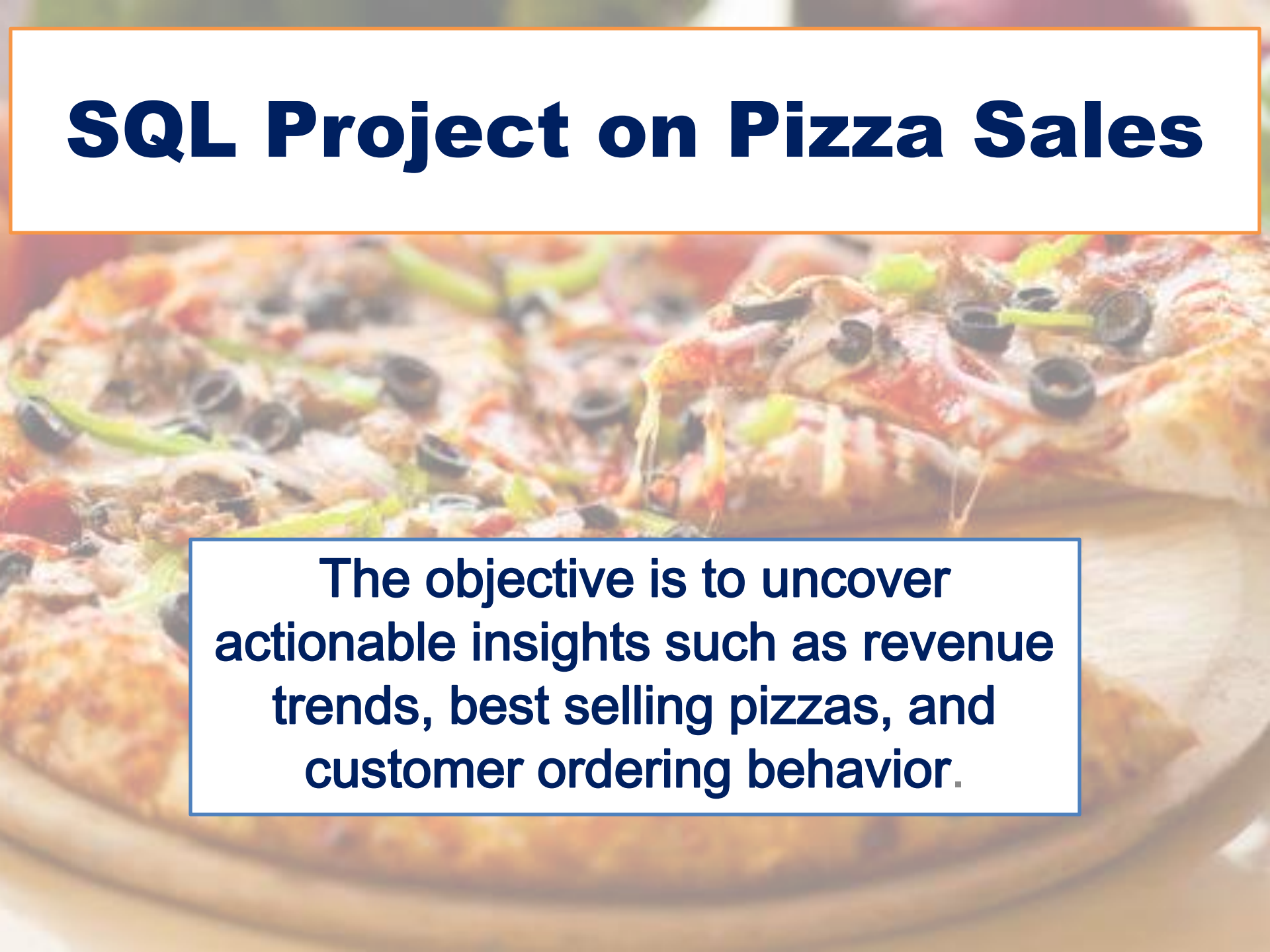
SQL Project on Pizza Sales



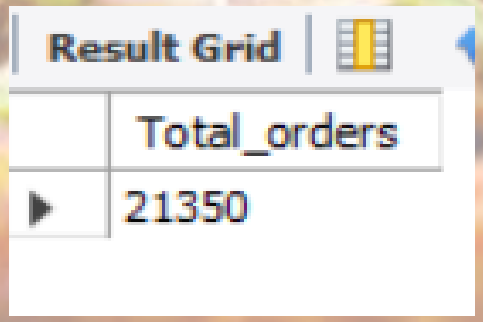
The objective is to uncover actionable insights such as revenue trends, best selling pizzas, and customer ordering behavior.

Question – Retrieve the total numbers of order placed

Query -

```
SELECT
    COUNT(*) AS Total_orders
FROM
    orders;
```

Output -



Question -Calculate the total revenue generated from pizza sales

Query -

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

Output -

Result Grid

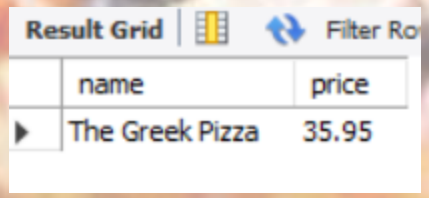
	revenue
▶	817860.05

Question - Identify the highest price pizza

Query -

```
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;
```

Output -

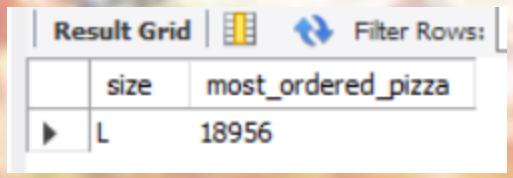


Question - Identify the most ordered pizza size

Query -

```
SELECT
    pizzas.size,
    SUM(order_details.quantity) AS most_ordered_pizza
FROM
    pizzas
        JOIN
    order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizzas.size
ORDER BY most_ordered_pizza DESC
LIMIT 1;
```

Output -


Result Grid | Filter Rows:

	size	most_ordered_pizza
▶	L	18956

Question - List the top 5 most ordered type of pizza with quantities

Query -

```
SELECT
    pizza_types.name AS Pizza_Name,
    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_Name
ORDER BY total_quantity DESC
LIMIT 5;
```

Output -

Result Grid | Filter Rows:

Pizza_Name	total_quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

Question - Find the total quantity of each pizza category ordered

Query -

```
SELECT
    pizza_types.category AS Pizza_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_category
ORDER BY total_quantity DESC;
```

Output -

Result Grid | Filter Rows:

Pizza_category	total_quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

Question - Determine the distribution of orders by hour of the day

Query -

```
SELECT
    HOUR(orders.order_time) AS Hour,
    COUNT(order_details.order_id) AS order_count
FROM
    orders
        JOIN
    order_details ON orders.order_id = order_details.order_id
GROUP BY Hour
ORDER BY Hour;
```

Output -

Result Grid | Filter

Hour	order_count
9	4
10	17
11	2672
12	6543
13	6203
14	3521
15	3170
16	4185
17	5143
18	5359
19	4350
20	3487
21	2528
22	1370
23	68

Question - Find category wise distribution of pizzas

Query -

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

Output -

Result Grid | Filter Ro

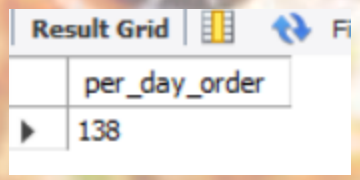
category	Distribution
Chicken	6
Classic	8
Supreme	9
Veggie	9

Question - Group Orders by Date and calculate the avg no. of pizzas ordered/day

Query -

```
SELECT
    ROUND(AVG(quantity), 0) AS per_day_order
FROM
    (SELECT
        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 b;
```

Output -

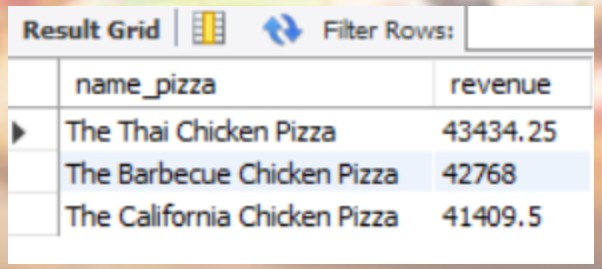


Question - Determine the top 3 most ordered pizza based on revenue

Query -

```
SELECT
    pizza_types.name AS name_pizza,
    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 pizzas.pizza_id = order_details.pizza_id
GROUP BY name_pizza
ORDER BY revenue DESC
LIMIT 3;
```

Output -



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

Question - Calculate the percentage contribution of each pizza category to total revenue

Query -

```
SELECT
    pizza_types.category AS caytegory_pizza,
    round(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) * 100,2) 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 caytegory_pizza;
```

Output -

Result Grid | Filter Rows:

caytegory_pizza	revenue
Classic	26.91
Veggie	23.68
Supreme	25.46
Chicken	23.96

Question - Analyze the cumulative revenue generated over time

Query -

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

Output -

Result Grid | Filter Rows:

order_date	Cumulative_revenue
2015-01-01	2713.8500000000004
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

Question - Determine the top 3 pizza types in each pizza category based on revenue

Query -

```
select Category_name,Pizza_name,revenue,revenue_rank
from
(select Category_name,Pizza_name,revenue,
rank() over(partition by Category_name order by revenue desc) as revenue_rank
from
(select pizza_types.category as Category_name,pizza_types.name as Pizza_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 Category_name,Pizza_name
order by Category_name,revenue desc) as b) as a
where revenue_rank <4 ;
```

Output -

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Category_name	Pizza_name	revenue	revenue_rank
Chicken	The Thai Chicken Pizza	43434.25	1
Chicken	The Barbecue Chicken Pizza	42768	2
Chicken	The California Chicken Pizza	41409.5	3
Classic	The Classic Deluxe Pizza	38180.5	1
Classic	The Hawaiian Pizza	32273.25	2
Classic	The Pepperoni Pizza	30161.75	3
Supreme	The Spicy Italian Pizza	34831.25	1
Supreme	The Italian Supreme Pizza	33476.75	2
Supreme	The Sicilian Pizza	30940.5	3
Veggie	The Four Cheese Pizza	32265.70000000065	1
Veggie	The Mexicana Pizza	26780.75	2
Veggie	The Five Cheese Pizza	26066.5	3