SQL PROJECT

BY HEMAVARSHINE

PROJECT OVERVIEW

Pizza Hut Sales Analysis

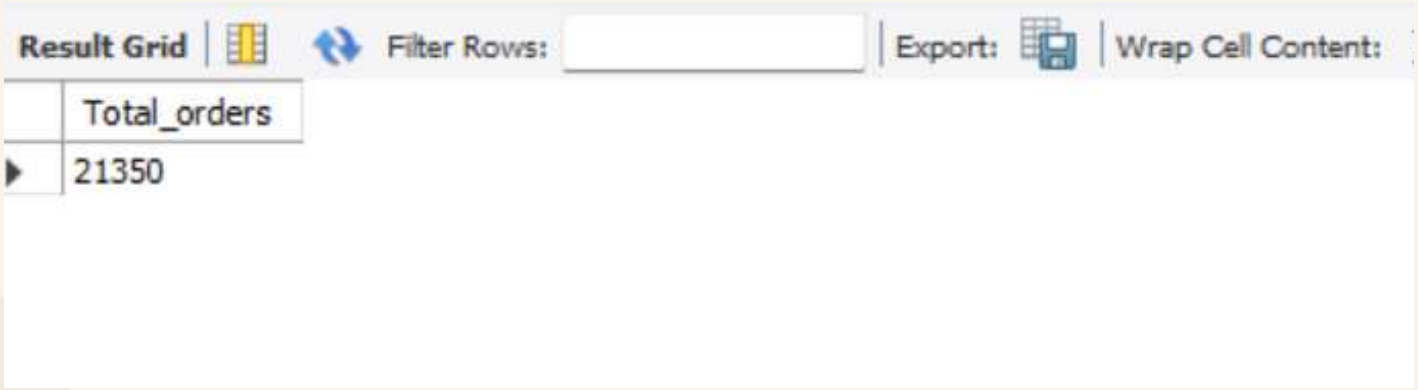
- Based on Number of ordered placed
- Total Revenue Generated
- Identifying most common Pizza ordered
- Top 5 most Ordered pizzas
- Percentage contribution of each pizza

CREATING A DATABASE AND TABLES

```
3  CREATE TABLE  Orders (
4      Order_id INT NOT NULL,
5      Order_date DATE NOT NULL,
6      Order_time TIME NOT NULL,
7      PRIMARY KEY  (order_id) );
8
9      SELECT * FROM Orders;
0
1  CREATE TABLE Order_details (
2      Order_details_id INT NOT NULL,
3      Order_id INT NOT NULL,
4      Pizza_id TEXT NOT NULL,
5      Quantity INT NOT NULL,
6      PRIMARY KEY (Order_details_id) );
7
```

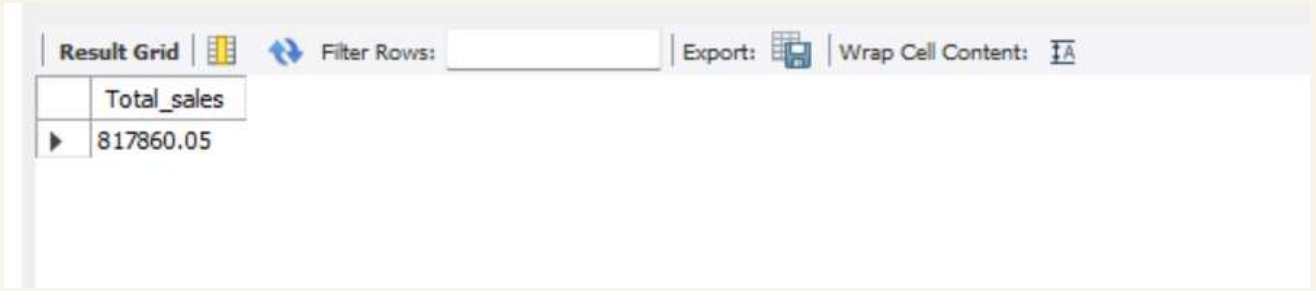
Retrieve Total Number of Order placed

```sql
SELECT
    COUNT(Order_id) AS Total_orders
FROM
    Orders;
```



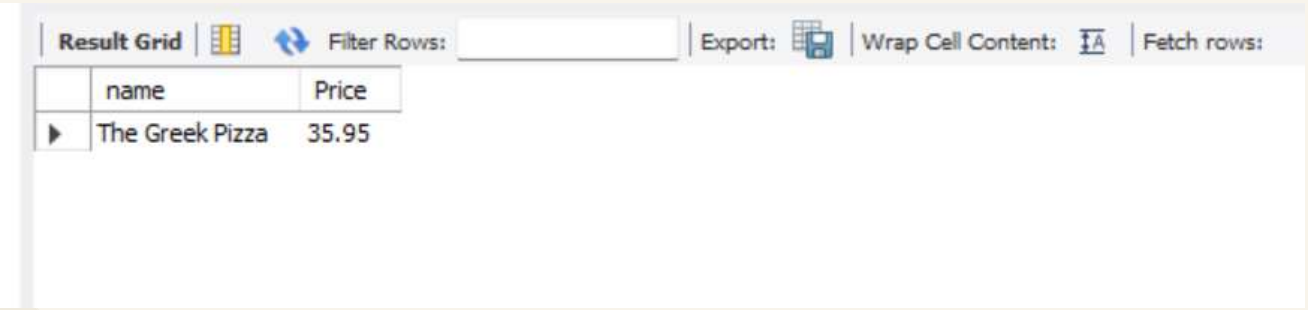
Calculate the Total Revenue generated from pizza sales

```sql
SELECT
    ROUND(SUM(Order_details.Quantity * Pizzas.Price), 2) AS Total_sales
FROM
    Order_details
        JOIN
    Pizzas ON Pizzas.Pizza_id = order_details.Pizza_id;
```



Identify the Highest-Rated Pizza

```sql
SELECT
    Pizza_types.name, Pizza.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
    Pizza.size,
    COUNT(order_details.Order_details_id) AS Order_count
FROM
    Pizzas
        JOIN
    Order_details ON Pizzas.Pizza_id = Order_details.Pizza_id
GROUP BY Pizza.size
ORDER BY Order_count DESC;
```

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

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

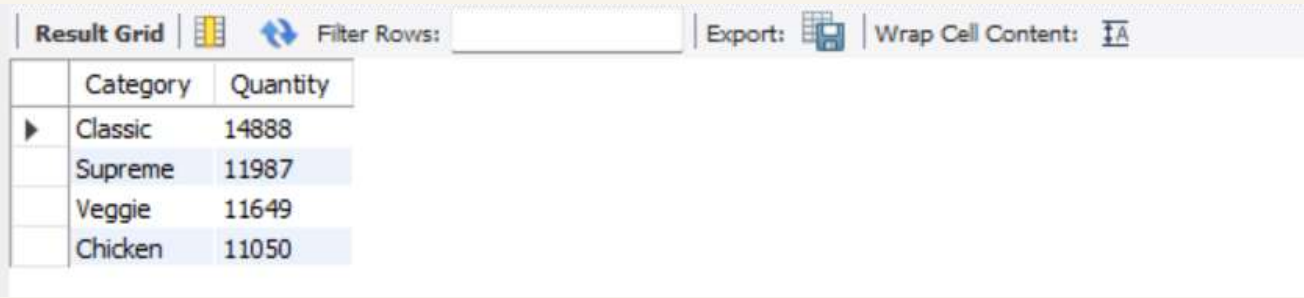
Top 5 most Ordered Pizza types along with their quantities

```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 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 table to find the Total quantity of each piza Category Ordered

```
SELECT
    Pizza_types.Category,
    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_type.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
    HOUR(Order_time) AS Hour, COUNT(Order_id) AS Order_count
FROM
    Orders
GROUP BY HOUR(Order_time);
```

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

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

Find the category wise distribution of pizzas

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

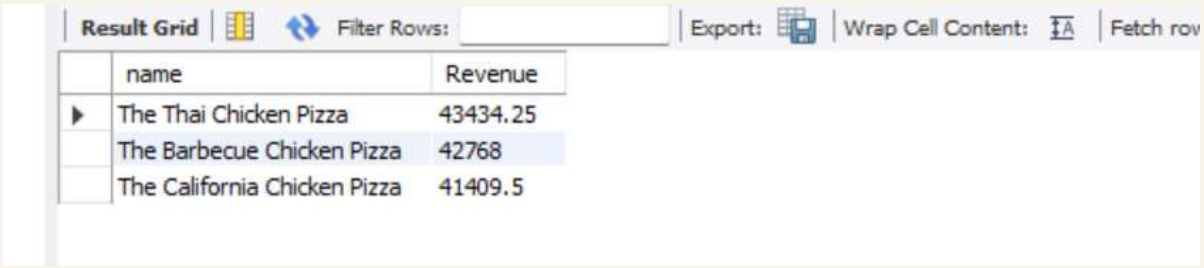
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	Category	Count_category
▶	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9

9

Determine the top 3 most ordered Pizza types based on Revenue

```sql
SELECT
    Pizza_types.name,
    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;
```



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

```sql
SELECT
    Pizza_types.Category,
    (SUM(Order_details.Quantity * Pizzas.Price) / (SELECT
                    ROUND(SUM(Order_details.Quantity * Pizzas.Price),
                                2) AS Total_sales
                FROM
                    Order_details
                        JOIN
                    Pizzas ON Pizzas.Pizza_id = order_details.Pizza_id)) * 100 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
ORDER BY Revenue DESC;
```

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

Category	Revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

Analyze the cumulative revenue generated over time

```sql
SELECT Order_date,
ROUND(SUM(Revenue) OVER(ORDER BY Order_date),2) 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 ;
```

Result Grid | Filter Rows:

Order_date	Cum_revenue
2015-01-01	2713.85
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	23990.35
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.3
2015-01-14	32358.7
2015-01-15	34343.5
2015-01-16	36937.65
2015-01-17	39001.75
2015-01-18	40978.6

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 Rnk
FROM
(SELECT Pizza_types.Category, Pizza_types.Name,
ROUND(SUM((order_details.Quantity) * Pizzas.Price),2) 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 Rnk <=3;
```

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	32265.7
The Mexicana Pizza	26780.75
The Five Cheese Pizza	26066.5

CONCLUSIONS

The analysis of Pizza Hut's data using SQL highlighted the top-ordered pizzas and their percentage contributions to overall sales. By identifying the most popular menu items, I was able to determine which pizzas generate the most revenue.


THANK YOU