SQL PROJECT ON PIZZA SALE

HELLO

my name is Ajay Visariya. in this project, i have utilized SQL queries to solve questions that were related to pizza sales.

QUESTIONS

Q:1 Retrieve the total number of orders placed.

Q:2 Calculate the total revenue generated from pizza sales.

Q:3 Identify the highest-priced pizza.

Q:4 Identify the most common pizza size ordered.

Q:5 List the top 5 most ordered pizza types along with their quantities.

Q:6 Join the necessary tables to find the total quantity of each pizza category.

Q:7 Determine the distribution of orders by hour of the day.

Q:8 Join relevant tables to find the category-wise distribution of pizzas.

Q:9 Group the orders by date, calculate the average number of pizzas ordered per day.

Q:10 Determine the top 3 most ordered pizza types based on revenue.

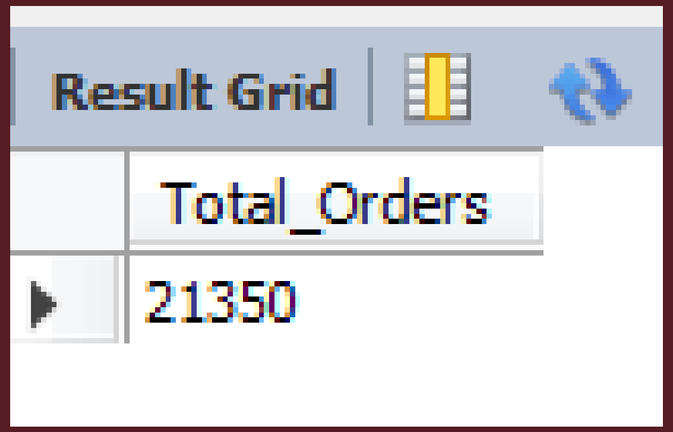
Q:11 Calculate the percentage contribution of each pizza type to total revenue.

Q:12 Analyze the cumulative revenue generated over time.

Q:13 Determine the top 3 most ordered pizza types based on revenue for each pizza category.

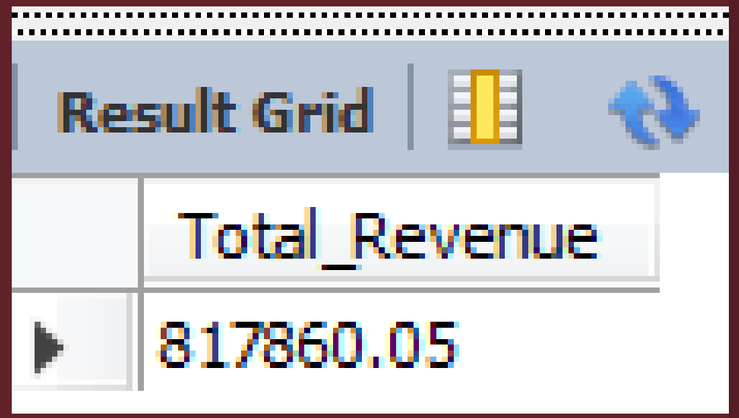
RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

```sql
SELECT
    COUNT(order_id) AS Total_Orders
FROM
    orders;
```



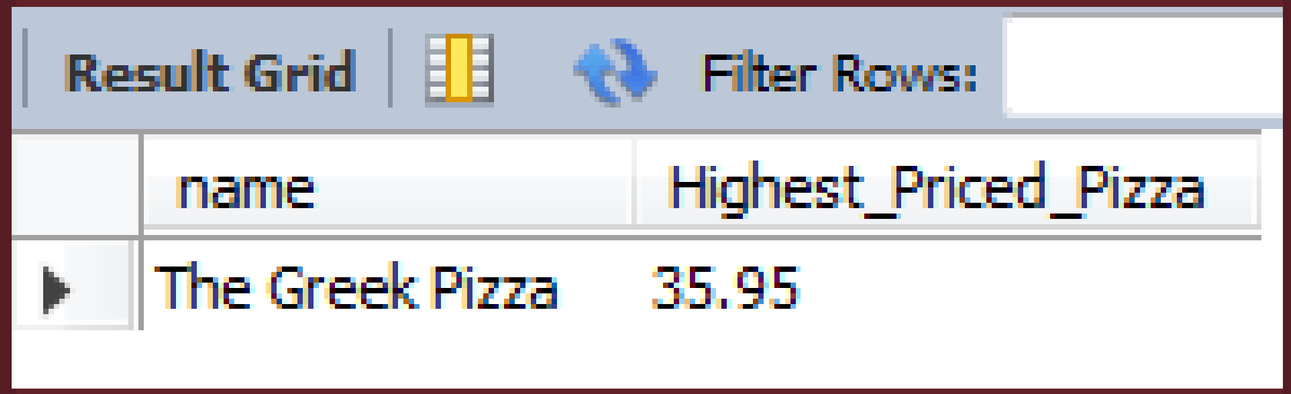
CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

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



IDENTIFY THE HIGHEST-PRICED PIZZA.

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



IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

```sql
SELECT
    pizzas.size,
    COUNT(order_details_id) AS Most_Common_Pizza_Size_ordered
FROM
    pizzas
        JOIN
    order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY size
ORDER BY Most_Common_Pizza_Size_ordered DESC
LIMIT 1;
```

Result Grid | Filter Rows:

size	Most_Common_Pizza_Size_ordered
L	18526

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

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

Result Grid | Filter Rows:

name	Most_Order_Pizza_Type
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.

```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 category order by Total_Quantity desc;
```

Result Grid | Filter Rows:

category	Total_Quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

```sql
SELECT
    COUNT(orders.order_id), order_time
FROM
    orders
GROUP BY order_time;

SELECT
    HOUR(order_time) AS Hour, COUNT(order_id) AS Order_Count
FROM
    orders
GROUP BY HOUR(order_time);
```

Result Grid | Filt

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

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

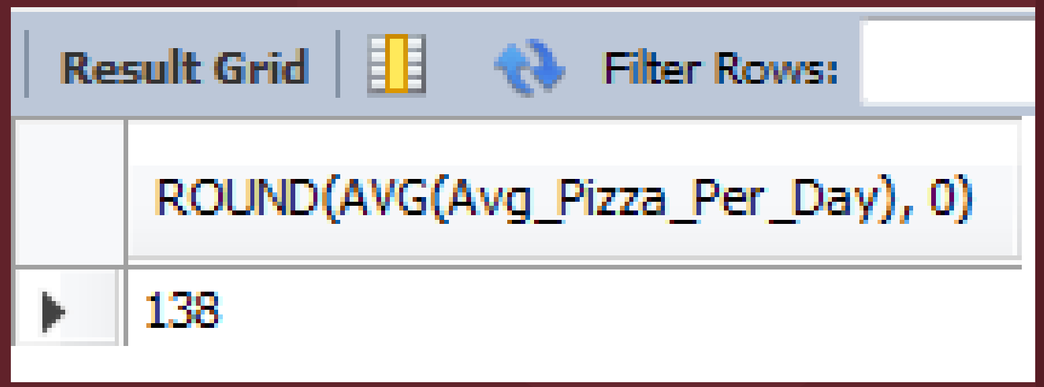
```sql
SELECT
    COUNT(pizza_type_id) AS Pizza_Distribution, category
FROM
    pizza_types
GROUP BY category
ORDER BY COUNT(pizza_type_id) DESC;
```

Result Grid | Filter Rows:

Pizza_Distribution	category
9	Supreme
9	Veggie
8	Classic
6	Chicken

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

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



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

```sql
SELECT
    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 name
ORDER BY Revenue DESC
LIMIT 3;
```

Result Grid | Filter Rows:

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_Revenue
        FROM
            order_details
                JOIN
            pizzas ON order_details.pizza_id = pizzas.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 category
ORDER BY Revenue DESC;
```

Result Grid | Filter Rows:

category	Revenue
Classic	26.90596025566967
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(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 order_date) as sales;
```

Result Grid | Filter Rows:

order_date	Cum_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

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:

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

THANK YOU