SQL PROJECT ON PIZZA HUT SALES

WELCOME TO PIZZA HUT

ORDER NOW

-by Sahil Gawali

INTRODUCTION

Hello, my name is Sahil, and I have a background in Computer Science with a strong interest in data analytics and problem-solving.
I enjoy leveraging tools like SQL to extract meaningful insights from complex datasets.

This Project focuses on the analysis of pizza sales data using SQL. The project explores various aspects of sales, such as daily revenue, cumulative trends, and customer purchasing patterns. By utilizing SQL techniques like aggregations, window functions, and subqueries, meaningful insights were derived from raw data.

This analysis highlights the power of SQL in uncovering trends and driving strategic decision-making, making it an essential tool for business intelligence and data-driven solutions.

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

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

Result Grid | Filter Rows:

total_revenue
817860

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

```sql
SELECT
    pt.category, SUM(od.quantity) AS quantity
FROM
    pizzas p
        JOIN
    pizza_types pt ON pt.pizza_type_id = p.pizza_type_id
        JOIN
    order_details od ON od.pizza_id = p.pizza_id
GROUP BY pt.category
ORDER BY quantity;
```

category	quantity
Chicken	11050
Veggie	11649
Supreme	11987
Classic	14888

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

```sql
SELECT
    pt.name AS name, SUM(p.price * od.quantity) AS revenue
FROM
    pizzas AS p
        JOIN
    pizza_types AS pt ON pt.pizza_type_id = p.pizza_type_id
        JOIN
    order_details AS od ON p.pizza_id = od.pizza_id
GROUP BY name
ORDER BY revenue DESC
LIMIT 3;
```

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

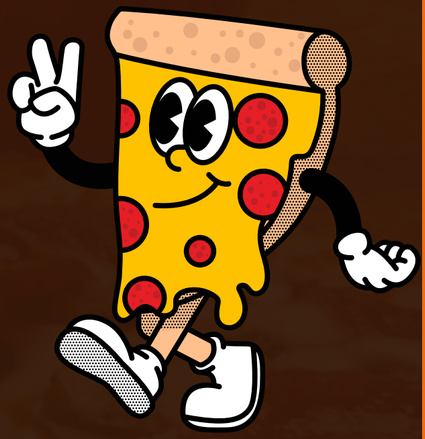
Analyze the cumulative revenue generated over time.

```sql
SELECT order_date,
CONCAT(ROUND(SUM(revenue),1),'$') as revenue,
CONCAT(ROUND(SUM(revenue) OVER (ORDER BY order_date),1),'$') as cummulative_revenue
FROM
(SELECT
    o.order_date AS order_date,
    ROUND(SUM(od.quantity * p.price), 1)AS revenue
FROM
    order_details od
        JOIN
    pizzas p ON p.pizza_id = od.pizza_id
        JOIN
    orders o ON o.order_id = od.order_id
GROUP BY order_date) AS daily_revenue
GROUP BY order_date
ORDER BY order_date;
```

order_date	revenue	cummulative_revenue
2015-01-01	2713.9$	2713.9$
2015-01-02	2731.9$	5445.8$
2015-01-03	2662.4$	8108.2$
2015-01-04	1755.5$	9863.7$
2015-01-05	2066$	11929.7$
2015-01-06	2429$	14358.7$
2015-01-07	2202.2$	16560.9$
2015-01-08	2838.3$	19399.2$

Calculate the percentage contribution of each pizza type to total revenue

```sql
SELECT
    pt.name AS name,
    CONCAT(ROUND((SUM(p.price * od.quantity) / (SELECT
        SUM(pizzas.price * order_details.quantity)
    FROM
        pizzas
            LEFT JOIN
        order_details ON pizzas.pizza_id = order_details.pizza_id)) * 100, 2), '%') AS revenue
FROM
    pizzas AS p
        JOIN
    pizza_types AS pt ON pt.pizza_type_id = p.pizza_type_id
        JOIN
    order_details AS od ON p.pizza_id = od.pizza_id
GROUP BY name
ORDER BY revenue DESC;
```



name	revenue
The Thai Chicken Pizza	5.31%
The Barbecue Chicken Pizza	5.23%
The California Chicken Pizza	5.06%
The Classic Deluxe Pizza	4.67%
The Spicy Italian Pizza	4.26%
The Southwest Chicken Pizza	4.24%
The Italian Supreme Pizza	4.09%

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

```sql
SELECT name,category,revenue,
rank() OVER ( ORDER BY revenue desc) as ranking
FROM
(SELECT
    pt.name AS name , pt.category as category, SUM(p.price * od.quantity) AS revenue
FROM
    pizzas AS p
        JOIN
    pizza_types AS pt ON pt.pizza_type_id = p.pizza_type_id
        JOIN
    order_details AS od ON p.pizza_id = od.pizza_id
GROUP BY name,category
ORDER BY revenue DESC
LIMIT 3) as pizza_revenue
group by name,category;
```

THAI CHICKEN PIZZA

BARBEQUE CHICKEN PIZZA

CALIFORNIA CHICKEN PIZZA

name	category	revenue	ranking
The Thai Chicken Pizza	Chicken	43434.25	1
The Barbecue Chicken Pizza	Chicken	42768	2
The California Chicken Pizza	Chicken	41409.5	3

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

```sql
SELECT
    ROUND(AVG(quantity),2)
FROM
    (SELECT
        o.order_date, SUM(od.quantity) AS quantity
    FROM
        orders o
    LEFT JOIN order_details od ON od.order_id = o.order_id
    GROUP BY o.order_date) AS order_quantity;
```

ROUND(AVG(quantity),2)
138.47

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

```sql
SELECT
    pt.name, SUM(od.quantity) AS quantity
FROM
    pizza_types AS pt
        JOIN
    pizzas p ON p.pizza_type_id = pt.pizza_type_id
        JOIN
    order_details od ON od.pizza_id = p.pizza_id
GROUP BY pt.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

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

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

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

IDENTIFY THE HIGHEST-PRICED PIZZA.

```sql
SELECT pt.name,p.price
FROM pizza_types pt
LEFT JOIN pizzas p
ON pt.pizza_type_id=p.pizza_type_id
order by price desc
limit 1;
```

HIGH

name	price
The Greek Pizza	35.95