SALES REPORT

INTRODUCTION

My name is Vinny Rajput .
i have solved a SQL based question on pizza sales .

EXECUTIVE SUMMARY

This executive summary provides a concise snapshot of our sales performance. Highlighting key achievements and acknowledging challenges, we'll delve into the details of our journey. The report offers insights into the factors shaping our sales outcomes and outlines strategic initiatives for future success. Join us as we navigate through the highlights and challenges, setting the stage for an insightful discussion on our sales landscape.

```sql
-- Determine the distribution of orders by hour of the day


SELECT
    HOUR(time) AS hour, COUNT(order_id) AS order_count
FROM
    orders
GROUP BY HOUR(time);
```

hour	order_count
11	20
12	38
13	32
14	25
15	26
16	26
17	36
18	35
19	27
20	29
21	17

```sql
-- Identify the most common pizza size ordered

SELECT
    quantity, COUNT(order_details_id)
FROM
    order_detail
GROUP BY quantity;

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

Result Grid

size	order_count
L	1411
M	1138
S	1101
XL	44
XXL	2

```sql
-- Determine the top 3 most pizza type based on revenue for each pizza category

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_detail.quantity)* pizzas.price) as revenue
from pizza_types join pizzas
on pizza_types.pizza_type_id = pizzas.pizza_type_id
join order_detail
on order_detail.pizza_id= pizzas.pizza_id
group by pizza_types.category,pizza_types.name) as a) as b
where rn<=3
```

Result Grid | Filter Rows: | Exp

name	revenue
The Thai Chicken Pizza	3319.75
The Barbecue Chicken Pizza	3232.5
The California Chicken Pizza	3008
The Pepperoni Pizza	2755.5
The Classic Deluxe Pizza	2588
The Greek Pizza	2280.8999999999996
The Italian Supreme Pizza	2661
The Sicilian Pizza	2553.25
The Spicy Italian Pizza	2496.75
The Four Cheese Pizza	2329.9000000000005
The Five Cheese Pizza	2312.5
The Vegetables + Vegetabl	2004.25

```sql
-- Analyze the cumulative revenue generated over time

select date,
sum(revenue) over(order by date) as cum_revenue
from
(select orders.date,
sum(order_detail.quantity * pizzas.price) as revenue
from order_detail join pizzas
ON order_detail.pizza_id=pizzas.pizza_id
join orders
on orders.order_id = order_detail.order_id
group by orders.date) as sales ;
```

Result Grid | Filter Rows:

date	cum_revenue
2015-01-01	2713.849999999995
2015-01-02	5445.749999999999
2015-01-03	8108.15
2015-01-04	9863.6
2015-01-05	11929.55
2015-01-06	12596.4

```sql
-- Group the orders by date and calculate the average number of pizzas ordered per day


SELECT
    ROUND(AVG(quantity), 0)
FROM
    (SELECT
        orders.date, SUM(order_detail.quantity) AS quantity
    FROM
        orders
    JOIN order_detail ON orders.order_id = order_detail.order_id
    GROUP BY orders.date) AS order_quantity;
```

Result Grid | Filter Rows

	ROUND(AVG(quantity), 0)
▶	126

```sql
-- List the top 5 most ordered pizza types along with their quantities
SELECT
    pizza_types.name, SUM(order_detail.quantity) AS quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_detail ON order_detail.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT 5;
```

Result Grid | Filter Rows:

name	quantity
The Pepperoni Pizza	220
The Barbecue Chicken Pizza	182
The Thai Chicken Pizza	181
The California Chicken Pizza	176
The Hawaiian Pizza	167

```sql
-- identify the most common pizza size ordered

SELECT
    quantity, COUNT(order_details_id)
FROM
    order_detail
GROUP BY quantity;

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

Result Grid | Filter Rows:

quantity	COUNT(order_details_id)
1	3629
2	64
3	3

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

```sql
SELECT
    pizza_types.category, SUM(order_detail.quantity) AS quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_detail ON order_detail.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY quantity DESC;
```

Result Grid | Filter

category	quantity
Classic	1127
Supreme	923
Veggie	906
Chicken	810