SALES DATA ANALYSIS using SQL

SHOP NAME : **PIZZA HURT**

DATA ANALYST : **Harshal Patil**

Calculate the Total Revenue generated from pizza Sales?

```sql
select SUM(od.quantity * pi.price) as TOTAL_REVENUE
from order_details od
JOIN pizzas pi
ON pi.pizza_id = od.pizza_id;
```

	total_revenue 🔒 numeric
1	817860.05

Calculate the Total number of orders placed till date?

```sql
select count(order_id) as TOTAL_ORDERS
from orders;
```

	total_orders 🔒 bigint
1	21350

Identify the Highest Price Pizza?

```sql
select pt.name, p.price as highest_price_pizza
from pizzas p
JOIN pizza_types pt
ON pt.pizza_type_id = p.pizza_type_id
ORDER BY p.price DESC LIMIT 1;
```

	name character varying (100) 🔒	highest_price_pizza numeric (5,2) 🔒
1	The Greek Pizza	35.95

Identify the Most Common pizza Size ordered?

```sql
select
    p.size as size,
    count(od.order_details_id) as order_count
from pizzas p
JOIN order_details od ON od.pizza_id = p.pizza_id
GROUP BY p.size
ORDER BY order_count desc limit 1;
```

	size character 🔒	order_count bigint 🔒
1	L	18526

List the Top 5 Most Ordered pizza types along with their quantities?

```sql
SELECT pizzas.pizza_type_id,SUM(order_details.quantity) as topfive_order_pizzas
FROM order_details
JOIN pizzas
ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizzas.pizza_type_id
ORDER BY topfive_order_pizzas DESC
LIMIT 5;
```

	pizza_type_id character varying (50) 🔒	topfive_order_pizzas bigint 🔒
1	classic_dlx	2453
2	bbq_ckn	2432
3	hawaiian	2422
4	pepperoni	2418
5	thai_ckn	2371

OR

```sql
SELECT
    pt.name,
    p.pizza_type_id,
    sum(od.quantity) as quantity
FROM pizzas p
JOIN order_details od ON od.pizza_id = p.pizza_id
JOIN pizza_types pt ON pt.pizza_type_id = p.pizza_type_id
GROUP BY p.pizza_type_id,pt.name
order by quantity desc limit 5;
```

	name character varying (100) 🔒	pizza_type_id character varying (50) 🔒	quantity bigint 🔒
1	The Classic Deluxe Pizza	classic_dlx	2453
2	The Barbecue Chicken Pizza	bbq_ckn	2432
3	The Hawaiian Pizza	hawaiian	2422
4	The Pepperoni Pizza	pepperoni	2418
5	The Thai Chicken Pizza	thai_ckn	2371

List the Top 5 Most Ordered pizza types along with their quantities?

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

	category character varying (100) 🔒	total_orders bigint 🔒
1	Classic	14888
2	Supreme	11987
3	Veggie	11649
4	Chicken	11050

Determine the distribution of orders by Hour of the day?

```sql
SELECT
    EXTRACT(HOUR FROM order_time) AS order_hour,
    COUNT(order_id) as total_order
FROM orders
GROUP BY order_hour
ORDER BY total_order desc;
```

	order_hour numeric 🔒	total_order bigint 🔒
1	12	2520
2	13	2455
3	18	2399
4	17	2336
5	19	2009
6	16	1920
7	20	1642
8	14	1472
9	15	1468
10	11	1231
11	21	1198
12	22	663
13	23	28
14	10	8
15	9	1

Find the Category-Wise Distribution of pizzas?

```sql
SELECT category,
        count(name)
FROM pizza_types
GROUP BY category;
```

	category character varying (100) 🔒	count bigint 🔒
1	Supreme	9
2	Classic	8
3	Veggie	9
4	Chicken	6

Group the orders by date and calculate the average number of pizzas ordered per day?

```sql
select round(avg(quantity)) As AVG_PerDay_Orders
from (SELECT orders.order_date,
        sum(order_details.quantity) as quantity
FROM orders
JOIN order_details ON order_details.order_id = orders.order_id
GROUP BY order_date
ORDER BY order_date) as order_quantity;
```

	avg_perday_orders numeric 🔒
1	138

Determine the Top 3 Most Ordered pizza types based on Revenue?

```sql
SELECT
    pizza_types.name,
    SUM(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 pizzas.pizza_id = order_details.pizza_id
GROUP BY pizza_types.name
ORDER BY revenue DESC
LIMIT 3;
```

	name character varying (100) 🔒	revenue numeric 🔒
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768.00
3	The California Chicken Pizza	41409.50

Analyze the Cumulative Revenue generated over time?

```sql
SELECT
    order_date,
    SUM(daily_revenue) OVER(order by order_date) as cummulative_revenue
FROM (SELECT
    DATE(orders.order_date) as order_date,
    SUM(order_details.quantity * pizzas.price) as daily_revenue
FROM pizzas
JOIN order_details ON order_details.pizza_id = pizzas.pizza_id
JOIN orders ON orders.order_id = order_details.order_id
GROUP BY orders.order_date
ORDER BY orders.order_date) AS t1;
```

	order_date date 🔒	cummulative_revenue numeric 🔒
1	2015-01-01	2713.85
2	2015-01-02	5445.75
3	2015-01-03	8108.15
4	2015-01-04	9863.60
5	2015-01-05	11929.55
6	2015-01-06	14358.50
7	2015-01-07	16560.70
8	2015-01-08	19399.05
9	2015-01-09	21526.40
10	2015-01-10	23990.35
Total rows: 358 of 358		Query complete

Determine the top 3 most ordered pizza types based on revenue for each pizza category?

```sql
SELECT a,b,revenue,rn
FROM(SELECT
    t1.a,
    t1.b,
    t1.revenue,
    RANK() OVER(partition by A order by revenue desc) as rn
FROM (SELECT pizza_types.category as a,
        pizza_types.name as b,
        SUM(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
GROUP BY pizza_types.category,pizza_types.name
ORDER BY pizza_types.category) AS t1) AS T2
WHERE rn <= 3;
```

	a character varying (100)	b character varying (100)	revenue numeric	rn bigint
1	Chicken	The Thai Chicken Pizza	43434.25	1
2	Chicken	The Barbecue Chicken Pizza	42768.00	2
3	Chicken	The California Chicken Pizza	41409.50	3
4	Classic	The Classic Deluxe Pizza	38180.50	1
5	Classic	The Hawaiian Pizza	32273.25	2
6	Classic	The Pepperoni Pizza	30161.75	3
7	Supreme	The Spicy Italian Pizza	34831.25	1
8	Supreme	The Italian Supreme Pizza	33476.75	2
9	Supreme	The Sicilian Pizza	30940.50	3
10	Veggie	The Four Cheese Pizza	32265.70	1
11	Veggie	The Mexicana Pizza	26780.75	2
12	Veggie	The Five Cheese Pizza	26066.50	3