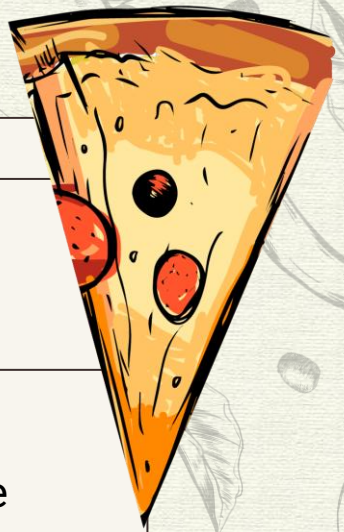
PIZZA SALES ANALYSIS

PIZZA

OBJECTIVE

The primary objectives are to achieve healthy monthly sales by the end of the year and to see a steady, modest increase in average monthly sales through Year. Additionally, the goal is to attain double-digit profit margins, ensuring sustainable growth and profitability.



ANALYSIS

RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

```
select count (order_id) as [Total Orders]
from orders
```

Results | Messages

	Total Orders
1	21350

Calculate the total revenue generated from pizza sales.

```
select round(sum(order_details.quantity * pizzas.price),3) as [Total Sales]
from order_details
join pizzas
on order_details.pizza_id = pizzas.pizza_id
```

Results | Messages

	Total Sales
1	817860.051

IDENTIFY THE HIGHEST-PRICED PIZZA.

```
select top 1 pizza_types.name, pizzas.price
    from pizzas
        join pizza_types
        on pizzas.pizza_type_id = pizza_types.pizza_type_id
        order by pizzas.price desc
```

Results | Messages

	name	price
1	The Greek Pizza	35.9500007629395

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

```
select pizzas.size, count(order_details.order_details_id) as [Size]
    from pizzas
        join order_details
        on pizzas.pizza_id = order_details.pizza_id
    group by pizzas.size
    order by count(order_details.order_details_id) desc
```

Results | Messages

	size	Size
1	L	18526
2	M	15385
3	S	14137
4	XL	544
5	XXL	28

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

```
select top 5 pizza_types.name, sum(order_details.quantity) as [Ordered Quantity]
    from pizzas
    join pizza_types
    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.name
    order by [Ordered Quantity] desc
```

Results | Messages

	name	Ordered Quantity
1	The Classic Deluxe Pizza	2453
2	The Barbecue Chicken Pizza	2432
3	The Hawaiian Pizza	2422
4	The Pepperoni Pizza	2418
5	The Thai Chicken Pizza	2371

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

```
select sum(order_details.quantity) as [Ordered Quantity],
    pizza_types.category
        from pizzas
            join pizza_types
            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
    order by [Ordered Quantity] desc
```

Results | Messages

	Ordered Quantity	category
1	14888	Classic
2	11987	Supreme
3	11649	Veggie
4	11050	Chicken

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

```
select DATEPART(hour, Time) as [Hours], count(*) as [Total Ordered by hours]
        from orders
    group by DATEPART(hour, Time)
    order by count(*) desc
```

Results | Messages

	Hours	Total Ordered by hours
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

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

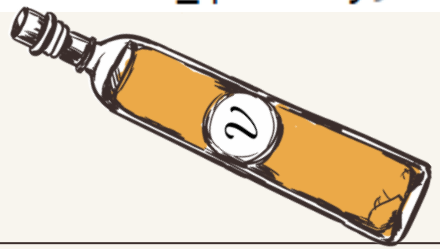
```
select DATEPART(hour, Time) as [Hours], count(*) as [Total Ordered by hours]
        from orders
    group by DATEPART(hour, Time)
    order by count(*) desc
```

Results | Messages

	category	Pizza
1	Chicken	6
2	Classic	8
3	Supreme	9
4	Veggie	9

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

```sql
select avg(Quantity) as [Average orders per Day]
from
    (select orders.date, sum(order_details.quantity) as [Quantity]
        from orders
        join order_details
        on orders.order_id = order_details.order_id
        group by orders.date)
    as order_quantity;
```



Results | Messages

	Average orders per Day
1	138

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

```
select top 3 pizza_types.name,
sum(order_details.quantity * pizzas.price) as [Revenue]
    from pizzas
        join pizza_types
        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.name
order by sum(order_details.quantity * pizzas.price) desc
```

Results | Messages

	name	Revenue
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768
3	The California Chicken Pizza	41409.5

CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE.

```sql
select pizza_types.name, round(sum(order_details.quantity * pizzas.price) /
    (select round(sum(order_details.quantity * pizzas.price),3) as [Total Sales]
        from order_details
        join pizzas
        on order_details.pizza_id = pizzas.pizza_id) *100, 2) as [Revenue]
    from pizzas
    join pizza_types
    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.name
    order by sum(order_details.quantity * pizzas.price) desc
```

Results | Messages

	name	Revenue
1	The Thai Chicken Pizza	5.31
2	The Barbecue Chicken Pizza	5.23
3	The California Chicken Pizza	5.06
4	The Classic Deluxe Pizza	4.67
5	The Spicy Italian Pizza	4.26
6	The Southwest Chicken Pizza	4.24
7	The Italian Supreme Pizza	4.09
8	The Hawaiian Pizza	3.95
9	The Four Cheese Pizza	3.95
10	The Sicilian Pizza	3.78
11	The Pepperoni Pizza	3.69
12	The Greek Pizza	3.48
13	The Mexicana Pizza	3.27
14	The Five Cheese Pizza	3.19
15	The Pepper Salami Pizza	3.12

Analyze the cumulative revenue generated over time.

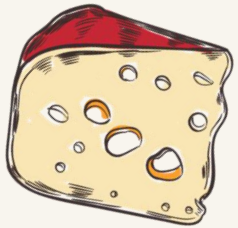
```
select [Order Date], Total, sum(Total) over (order by [Order Date]) as [Cummulative Orders]
        from
            (select orders.date as [Order Date], round(sum(order_details.quantity * pizzas.price),2) as [Total]
        from pizzas
        join order_details
        on pizzas.pizza_id = order_details.pizza_id
    join orders
    on orders.order_id = order_details.order_id
group by orders.date) as sales
order by [Order Date];
```

Results | Messages

	Order Date	Total	Cummulative Orders
1	2015-01-01	2713.85	2713.85
2	2015-01-02	2731.9	5445.75
3	2015-01-03	2662.4	8108.15
4	2015-01-04	1755.45	9863.6
5	2015-01-05	2065.95	11929.55
6	2015-01-06	2428.95	14358.5
7	2015-01-07	2202.2	16560.7
8	2015-01-08	2838.35	19399.05
9	2015-01-09	2127.35	21526.4
10	2015-01-10	2463.95	23990.35
11	2015-01-11	1872.3	25862.65
12	2015-01-12	1919.05	27781.7
13	2015-01-13	2049.6	29831.3
14	2015-01-14	2527.4	32358.7
15	2015-01-15	1984.8	34343.5

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

```sql
select category, name, Revenue, ranking
from
    (select category, name, Revenue, rank() over (partition by category order by Revenue desc) as ranking
        from
            (select category, name, round(sum(quantity * price),3) as Revenue
                from pizza_types
                join pizzas
                on pizza_types.pizza_type_id = pizzas.pizza_type_id
        join order_details
        on pizzas.pizza_id = order_details.pizza_id
    group by category, name) as a) as b
    where ranking <=3;
```



Results | Messages

	category	name	Revenue	ranking
1	Chicken	The Thai Chicken Pizza	43434.25	1
2	Chicken	The Barbecue Chicken Pizza	42768	2
3	Chicken	The California Chicken Pizza	41409.5	3
4	Classic	The Classic Deluxe Pizza	38180.5	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	30940.5	3
10	Veggie	The Four Cheese Pizza	32265.701	1
11	Veggie	The Mexicana Pizza	26780.75	2
12	Veggie	The Five Cheese Pizza	26066.5	3

THANK YOU

Do you have any questions?