



PIZZA SALES ANALYSIS USING SQL



PROBLEM SOLVED IN THIS PROJECT

Retrieve the total number of orders placed.

Calculate the total revenue generated from pizza sales.

Identify the highest-priced pizza.

Identify the most common pizza size ordered.

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

Join the necessary tables to find the total quantity of each pizza

category ordered.

Determine the distribution of orders by hour of the day.

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

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

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

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

Analyze the cumulative revenue generated over time.

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

1-RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

```
1      #Retrieve the total number of orders placed  
2 •  SELECT  
3          COUNT(Order_id) AS Total_orders  
4 FROM  
5     orders
```

Result Grid	
	Total_orders
▶	21350

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

```
1      #Calculate the total revenue generated from pizza sales.  
2 •  SELECT  
3   ⚑     ROUND(SUM(order_detail.quantity * pizzas.price),  
4           2) AS total_sales  
5   FROM  
6   order_detail  
7   JOIN
```

Result Grid |



Filter Rows:

Export:

Wrap Cell Content:

total_sales
817860.05

IDENTIFY THE HIGHEST-PRICED PIZZA

```
1      #Identify the highest-priced pizza.  
2 •   SELECT  
3           pizza_id, pizza_type_id, price  
4     FROM  
5           pizzas  
6 WHERE  
7     price = (SELECT  
8             MAX(price)  
9     FROM  
10            pizzas);
```

Result Grid | Filter Rows: | Export

	pizza_id	pizza_type_id	price
▶	the_greek_xxL	the_greek	35.95

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

```
1      #Identify the most common pizza size ordered.  
2  ●   SELECT quantity, count(order_details_id)  
3       FROM order_detail group by quantity;  
4  
5  ●   SELECT  
6       pizzas.size,  
7       COUNT(order_detail.order_details_id) AS order_count  
8       FROM  
9       pizzas  
10      JOIN  
11      order_detail ON pizzas.pizza_id = order_detail.pizza_id  
12      GROUP BY pizzas.size  
13      ORDER BY order_count DESC  
14      LIMIT 1;
```

Result Grid | Filter Rows: Export:

	size	order_count
L		18526

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

```
1      #List the top 5 most ordered pizza types along with their quantities.  
2  
3  ●  SELECT  
4      pizza_types.name, SUM(order_detail.quantity)  
5  FROM  
6      pizza_types  
7      JOIN  
8      pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id  
9      JOIN  
10     order_detail ON order_detail.pizza_id = pizzas.pizza_id  
11    GROUP BY pizza_types.name  
12    ORDER BY SUM(order_detail.quantity) DESC  
13    LIMIT 5;
```

Result Grid		Filter Rows:	Export:	Wrap Cell
	name	sum(order_detail.quantity)		
▶	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 ORDERED.

```
1      ##Join the necessary tables to find the total quantity of each pizza category ordered.  
2  
3  ●   SELECT  
4      pizza_types.category, SUM(order_detail.quantity) AS quantity  
5  FROM  
6      pizza_types  
7      JOIN  
8      pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id  
9      JOIN  
10     order_detail ON order_detail.pizza_id = pizzas.pizza_id  
11    GROUP BY pizza_types.category  
12    ORDER BY quantity DESC;  
...
```

Result Grid | Filter Rows: _____ | Export: Wrap Cell Content:

	category	quantity
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

```
1      #Determine the distribution of orders by hour of the day.  
2 •  SELECT  
3          HOUR(order_time), COUNT(order_id)  
4  FROM  
5      orders  
6  GROUP BY HOUR(order_time)  
7  ORDER BY COUNT(order_id) DESC;
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

	HOUR(order_time)	COUNT(order_id)
▶	12	2520
	13	2455
	18	2399
	17	2336
	19	2009
	16	1920
	20	1642
	14	1472
	15	1468
	11	1231

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



```
1 #Join relevant tables to find the category-wise distribution of pizzas.  
2  
3 • select category ,count(name) from pizza_types  
4 GROUP by category;
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

category	count(name)
Chicken	6
Classic	8
Supreme	9
Veggie	9

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



```
1      #Group the orders by date and calculate the average number of pizzas ordered per day.  
2  
3 •   SELECT  
4         round(AVG(quantity),0) as avg_pizzas_perday  
5     FROM  
6     (SELECT  
7         orders.order_date, SUM(order_detail.quantity) AS quantity  
8     FROM  
9         orders  
10    JOIN order_detail ON orders.order_id = order_detail.Order_id  
11    GROUP BY orders.order_date) AS data;
```

Result GridFilter Rows:Export:Wrap Cell Content:

avg_pizzas_perday
138

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



```
1      #Determine the top 3 most ordered pizza types based on revenue.  
2 •  SELECT  
3      pizza_types.name,  
4      SUM(order_detail.quantity * pizzas.price) AS revenue  
5  FROM  
6      pizza_types  
7      JOIN  
8      pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id  
9      JOIN  
10     order_detail ON order_detail.pizza_id = pizzas.pizza_id  
11    GROUP BY pizza_types.name  
12    ORDER BY revenue DESC  
13    LIMIT 3;
```

result Grid | Filter Rows: Export: Wrap Cell Content:

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.



```
1      #Calculate the percentage contribution of each pizza type to total revenue.  
2 •  SELECT  
3      pizza_types.category,  
4      ROUND(SUM(order_detail.quantity * pizzas.price)  
5      / (select sum(order_detail.quantity * pizzas.price)  
6      as total_sales FROM order_detail join pizzas on pizzas.pizza_id = order_detail.pizza_id ) *100 ,2)  
7  FROM  
8      pizza_types  
9      JOIN  
10     pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id  
11     JOIN
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

	category	revenue
▶	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68

ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.



```
1      #Analyze the cumulative revenue generated over time.  
2 •  select order_date,  
3      sum(revenue) over (order by order_date) as cum_revenue  
4  from  
5  (select orders.order_date,  
6      sum(order_detail.quantity * pizzas.price) as revenue  
7  FROM order_detail join pizzas  
8  on order_detail.pizza_id = pizzas.pizza_id  
9  JOIN orders on orders.order_id = order_detail.order_id  
10 group by orders.order_date) as sales
```

Result Grid | Filter Rows: _____ | Export: Wrap Cell Content:

	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
	2015-01-06	14358.5
	2015-01-07	16560.7
	2015-01-08	19399.05
	2015-01-09	21526.4

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

```
1  #Determine the top 3 most ordered pizza types based on revenue for each pizza category.  
2  ● select name , revenue  
3  from  
4  (select category, name, revenue,  
5   rank () over( partition by category order by revenue desc ) as rn  
6  from  
7  (select pizza_types.category, pizza_types.name,  
8   sum(order_detail.quantity * pizzas.price) as revenue  
9   from pizza_types join pizzas on  
10  pizza_types.pizza_type_id = pizzas.pizza_type_id  
11  join order_detail on order_detail.pizza_id = pizzas.pizza_id  
12  group by pizza_types.category , pizza_types.name ) as a) as b  
13  where rn <=3;
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	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		