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PIZZA SALES ANALYSIS

SQL PROJECT

PIZZA SALES ANALYSIS

BASICS:

1. Retrieve the total number of orders placed.
2. Calculate the total revenue generated from pizza sales.
3. Identify the highest-priced pizza.
4. Identify the most common pizza size ordered.
5. List the top 5 most ordered pizza types along with their quantities.

INTERMEDIATE:

1. Join the necessary tables to find the total quantity of each pizza category ordered.
2. Determine the distribution of orders by hour of the day.
3. Join relevant tables to find the category-wise distribution of pizzas.
4. Group the orders by date and calculate the average number of pizzas ordered per day.
5. Determine the top 3 most ordered pizza types based on revenue.

ADVANCED:

1. Calculate the percentage contribution of each pizza type to total revenue.
2. Analyze the cumulative revenue generated over time.
3. Determine the top 3 most ordered pizza types based on revenue for each pizza category.

PIZZA SALES ANALYSIS

BASIC

RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED

```
2
3 •   SELECT
4         COUNT(order_id) AS total_orders
5     FROM
6         orders;
```

QUERY

OUTPUT

Result Grid

	total_orders
▶	21350

PIZZA SALES ANALYSIS

BASIC

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES

```sql
SELECT
    ROUND(SUM(orders_details.quantity * pizzas.price),
            2) AS total_sales
FROM
    orders_details
        JOIN
    pizzas ON orders_details.pizza_id = pizzas.pizza_id;
```

QUERY

OUTPUT

Result Grid

	total_sales
▶	817860.05

PIZZA SALES ANALYSIS

BASIC

IDENTIFY THE HIGHEST-PRICED PIZZA

```sql
SELECT
    pizza_types.name, pizzas.price
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY pizzas.price DESC
LIMIT 1;
```

QUERY

OUTPUT

Result Grid | Filter Rov

name	price
The Greek Pizza	35.95

PIZZA SALES ANALYSIS

BASIC

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED

```sql
SELECT
    pizzas.size,
    COUNT(orders_details.order_details_id) AS order_count
FROM
    pizzas
        JOIN
    orders_details ON pizzas.pizza_id = orders_details.pizza_id
GROUP BY pizzas.size
ORDER BY order_count DESC
LIMIT 1;
```

QUERY

OUTPUT

Result Grid | Filte

size	order_count
L	18526

PIZZA SALES ANALYSIS

BASIC

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

```sql
SELECT
    pizza_types.name, SUM(orders_details.quantity) AS quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT 5;
```

QUERY

OUTPUT

Result Grid | Filter Rows:

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

PIZZA SALES ANALYSIS

INTERMEDIATE

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

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

QUERY

OUTPUT

Result Grid

category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

PIZZA SALES ANALYSIS

INTERMEDIATE

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY

```sql
SELECT
    HOUR(order_time) AS hours, COUNT(order_id) AS quantity
FROM
    orders
GROUP BY HOUR(order_time);
```

QUERY

OUTPUT

Result Grid

hours	quantity
11	1231
12	2520
13	2455
14	1472
15	1468
16	1920
17	2336
18	2399
19	2009
20	164
21	1198
22	663
23	28
10	8
9	1

2009

PIZZA SALES ANALYSIS

INTERMEDIATE

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

```
3    SELECT
4        category, COUNT(name)
5    FROM
6        pizza_types
7    GROUP BY category;
```

QUERY

OUTPUT

Result Grid | Filter Row

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

Resets all sorted c

PIZZA SALES ANALYSIS

INTERMEDIATE

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

```sql
SELECT
    ROUND(AVG(quantity), 0) as avg_pizzas_ordered_per_day
FROM
    (SELECT
        orders.order_date, SUM(orders_details.quantity) AS quantity
    FROM
        orders
    JOIN orders_details ON orders.order_id = orders_details.order_id
    GROUP BY orders.order_date) AS ordered_quantity;
```

QUERY

OUTPUT

Result Grid | Filter Rows:

avg_pizzas_ordered_per_day
138

PIZZA SALES ANALYSIS

INTERMEDIATE

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE

```sql
SELECT
    pizza_types.name,
    ROUND(SUM(orders_details.quantity * pizzas.price),
            2) AS revenue
FROM
    pizza_types
        JOIN
    pizzas on pizzas.pizza_type_id=pizza_types.pizza_type_id
    join orders_details on orders_details.pizza_id=pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY revenue DESC
LIMIT 3;
```

QUERY

OUTPUT

Result Grid | Filter Rows:

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

PIZZA SALES ANALYSIS

ADVANCED

CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE

```sql
SELECT
    pizza_types.category,
    ROUND(SUM(pizzas.price * orders_details.quantity) / (SELECT
                    ROUND(SUM(orders_details.quantity * pizzas.price),
                                2)
                FROM
                    orders_details
                        JOIN
                    pizzas ON orders_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
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY category
ORDER BY revenue DESC;
```

QUERY

OUTPUT

category	revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

PIZZA SALES ANALYSIS

ADVANCED

CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE

```
3  •  select order_date,sum(revenue) over(order by order_date) as cum_revenue
4     from (select orders.order_date,sum(orders_details.quantity*pizzas.price) as revenue
5     from orders_details
6     join pizzas on orders_details.pizza_id=pizzas.pizza_id
7     join orders on orders.order_id=orders_details.order_id
8     group by order_date) as sales;
```

QUERY

OUTPUT

Result Grid | Filter Rows:

order_date	cum_revenue
2015-01-01	2713.850000000004
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
2015-01-10	23990.350000000002
2015-01-11	25862.65
2015-01-12	27781.7

PIZZA SALES ANALYSIS

ADVANCED

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

```
3 •  select name,revenue, ranking from
4    (select category,name,revenue,
5    rank() over(partition by category order by revenue desc) as ranking
6    from (select pizza_types.category,pizza_types.name,sum(orders_details.quantity*pizzas.price) as revenue
7    from pizza_types
8    join pizzas on pizza_types.pizza_type_id=pizzas.pizza_type_id
9    join orders_details on orders_details.pizza_id=pizzas.pizza_id
10   group by pizza_types.category,pizza_types.name) as a) as b
11   where ranking <=3 ;
```

QUERY

OUTPUT

name	revenue	ranking
The Thai Chicken Pizza	43434.25	1
The Barbecue Chicken Pizza	42768	2
The California Chicken Pizza	41409.5	3
The Classic Deluxe Pizza	38180.5	1
The Hawaiian Pizza	32273.25	2
The Pepperoni Pizza	30161.75	3
The Spicy Italian Pizza	34831.25	1
The Italian Supreme Pizza	33476.75	2
The Sicilian Pizza	30940.5	3
The Four Cheese Pizza	32265.70000000065	1
The Mexicana Pizza	26780.75	2
The Five Cheese Pizza	26066.5	3

PIZZA ANALYSIS

THANK YOU!