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PIZZA SALES ANALYSIS PROJECT

ABOUT PROJECT

In the Pizza Sales Analysis Project, I used MySQL as the primary database management system to store and manage large volumes of sales, customer, and menu data. With MySQL, I was able to efficiently query and manipulate the data using SQL commands to identify trends, track sales performance, and analyze customer preferences.

CREATING DATABASE AND TABLES

Limit to 200 rows

```
1  create database pizzahut;
2
3  create table orders (
4  order_id int not null,
5  order_date date not null,
6  order_time time not null,
7  primary key(order_id) );
8
9
10 create table order_details (
11 order_details_id int not null,
12 order_id int not null,
13 pizza_id text not null,
14 quantity int not null,
15 primary key(order_details_id) );
16
```

QUERY 1

```
1    -- Retrieve the total number of orders placed --
2
3 •  select count(order_id) as total_oders from orders;
```

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

total_oders
21350

QUERY 2

```sql
-- Calculate the total revenue generated from pizza sales --


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

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

total_sales
817860.05

QUERY 3

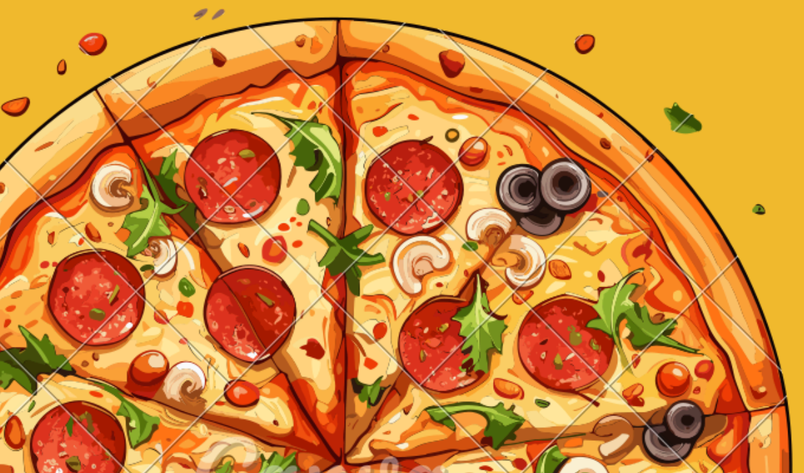
```sql
-- Identify the highest-priced pizza.--


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;

```

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

name	price
The Greek Pizza	35.95



QUERY 4

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

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

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

size	order_count
L	18526
M	15385
S	14137
XL	544
XXL	28

QUERY 5

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

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

QUERY 6

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

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

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

category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

QUERY 7

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


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

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

hour	order_count
11	1231
12	2520
13	2455
14	1472
15	1468
16	1920
17	2336
18	2399
19	2009
20	1642
21	1198
22	663
23	28
10	8
9	1

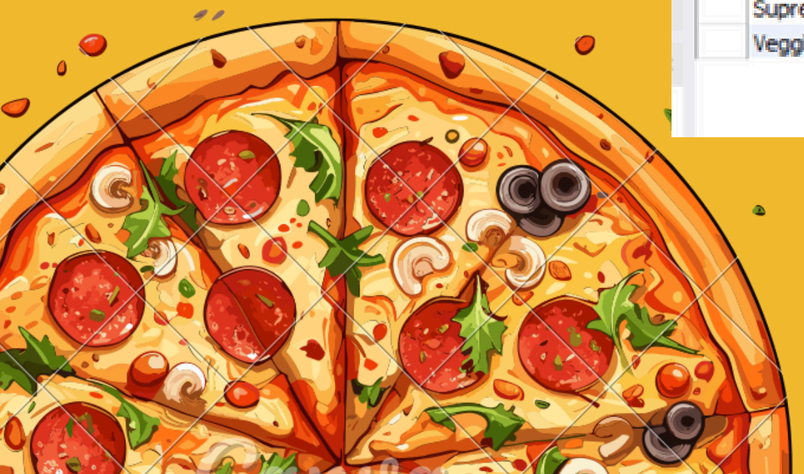
QUERY 8

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

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

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

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



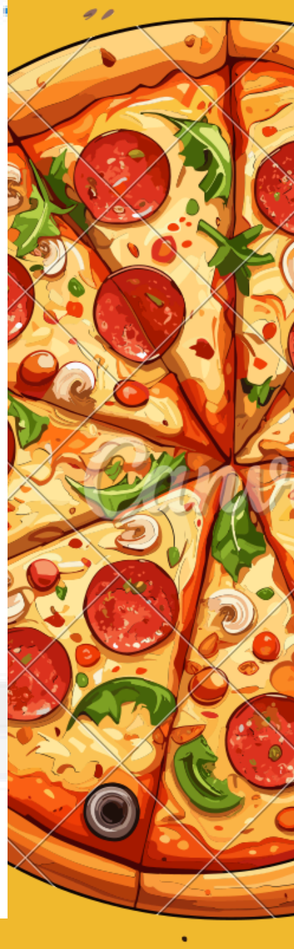
QUERY 9

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

SELECT
    ROUND(AVG(quantity), 0) as avg_pizzas_ordered_perday
FROM
    (SELECT
        orders.order_date, SUM(order_details.quantity) AS quantity
    FROM
        orders
    JOIN order_details ON orders.order_id = order_details.order_id
    GROUP BY orders.order_date) AS order_quantity;
```

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

avg_pizzas_ordered_perday
138



QUERY 10

```sql
-- Determine the top 3 most ordered pizza types based on revenue.
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 order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY revenue DESC
LIMIT 3;
```

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

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

QUERY 11

```sql
-- Calculate the percentage contribution of each pizza type to total revenue.
SELECT
    pizza_types.category,
    ROUND(SUM(order_details.quantity * pizzas.price) / (SELECT
                    ROUND(SUM(order_details.quantity * pizzas.price),
                                2) AS total_sales
                FROM
                    order_details
                        JOIN
                    pizzas ON pizzas.pizza_id = order_details.pizza_id) * 100,
            2) AS revenue
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY revenue DESC;
```

Result Grid | Filter Rows:

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

QUERY 12

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


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

Result Grid | Filter Rows:

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

QUERY 13

Result Grid | Filter Rows:

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

Result 5

Limit to 200 rows

```sql
-- Determine the top 3 most ordered pizza types 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_details.quantity) * pizzas.price) as revenue
from pizza_types join pizzas
on pizza_types.pizza_type_id = pizzas.pizza_type_id
join order_details
on order_details.pizza_id = pizzas.pizza_id
```