PIZZA SALES REPORT

HELLO,my name is FIZA YASMIN and this is my protfolio project on database and management system...
i is basically a pizza sales report.
here we have analyse the sales, revenue, most selling pizzas and many more...

AGENDA

- 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.
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- 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.
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- 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.

- retrieve the total no of orders:

```
SELECT count(order_id) FROM orders;
```

Result Grid

	count(order_id)
▸	21350

-- calculate the total revenue generated by orders

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

Result Grid

total_revenue
817860.05

-- identify the highest priza 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
```

Result Grid | Filter Ro

name	price
The Greek Pizza	35.95

-- identify the most common size ordered

```sql
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
LIMIT 1
```

Result Grid | Filter R

size	order_count
L	18526

-- list the top 5 most ordered pizza types
-- along with their quantities

```sql
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 pizzas.pizza_id = order_details.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT 5;
```

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

- Join the relevant tables to calculate the total
  Determine the quantity of each pizza category ordered

```sql
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

category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

-- determine the the distribution of orders by hour of the day

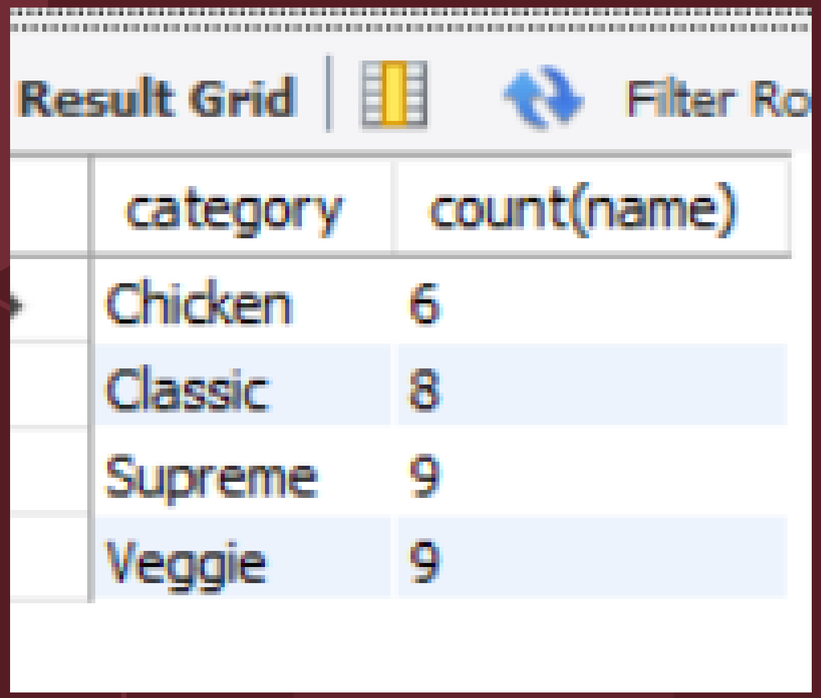
```sql
SELECT
    HOUR(order_time) AS orderhour, SUM(order_id) AS order_count
FROM
    orders
GROUP BY HOUR(order_time)
ORDER BY order_count DESC;
```

Result Grid | Filter Rows:

orderhour	order_count
12	26929470
13	26615205
18	25808745
17	24312547
19	21634044
16	20551671
20	17668990
15	15634879
14	14867592
11	13336362
21	12868673
22	7269872
23	330700
10	73999
9	19176

-- join relevant tables to find the category wise distribution of pizzas

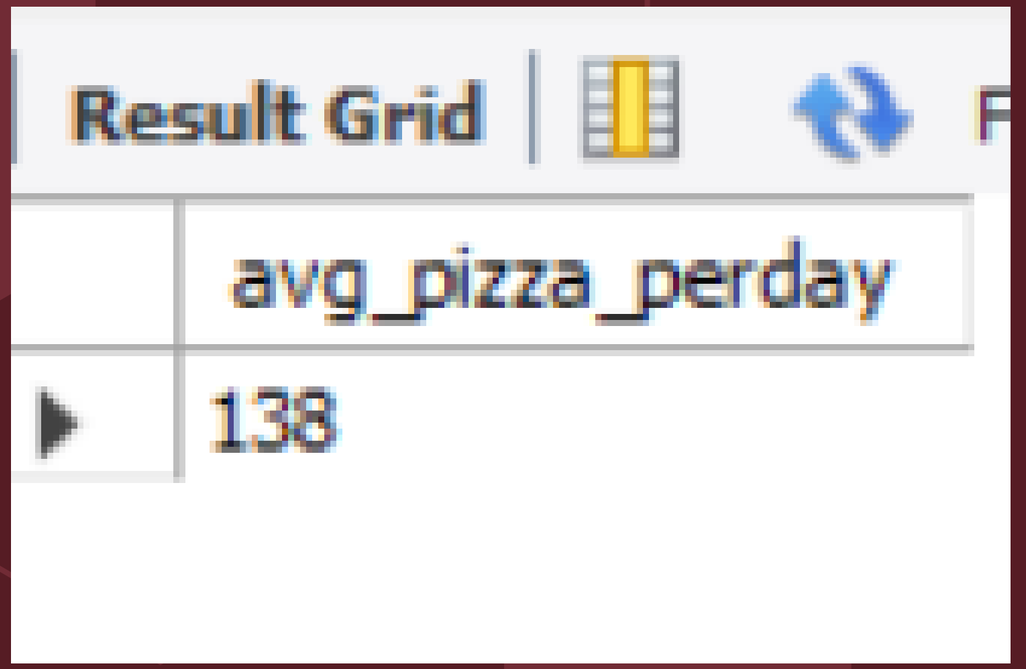
```
select category ,count(name) from pizza_types
group by category;
```



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

```sql
SELECT
    ROUND(AVG(quantity), 0) as avg_pizza_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;
```



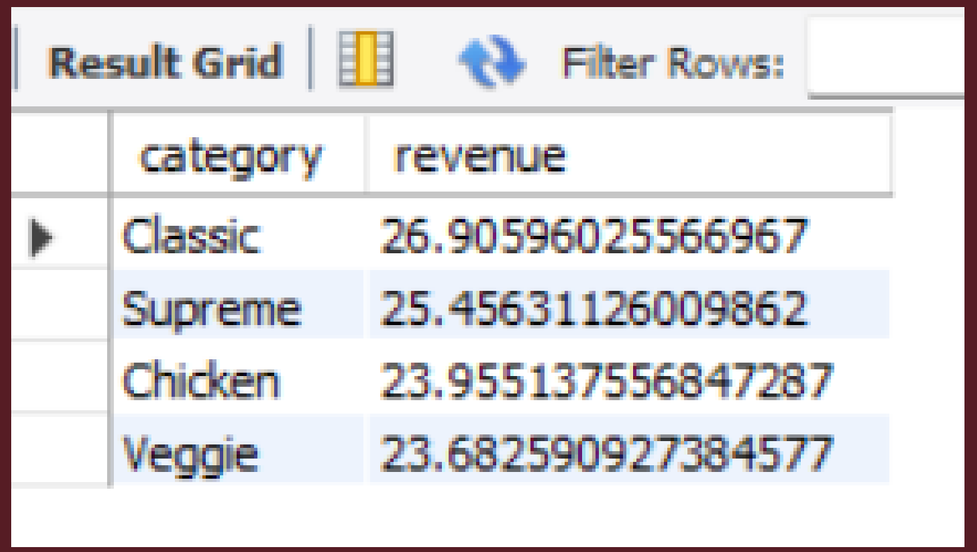
```sql
SELECT
    pizza_types.name,
    SUM(order_details.quantity * pizzas.price) AS revenue
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY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

Result Grid | Filter Rows:

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

```sql
SELECT
    pizza_types.category,
    (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 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:

category	revenue
Classic	26.90596025566967
Supreme	25.45631126009862
Chicken	23.955137556847287
Veggie	23.682590927384577

-- analyze the cumulative revenue generated over time

```sql
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
2015-01-10	23990.350000000002
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.300000000003
2015-01-14	32358.700000000004
2015-01-15	34343.50000000001
2015-01-16	36937.65000000001
2015-01-17	39001.75000000001
2015-01-18	40978.600000000006
2015-01-19	43365.75000000001
2015-01-20	45763.65000000001
2015-01-21	47804.20000000001
2015-01-22	50300.90000000001
2015-01-23	52724.600000000006
2015-01-24	55013.850000000006
2015-01-25	56631.40000000001

Result 2

2015-02-10	93410.05000000002
2015-02-11	95870.05000000002
2015-02-12	98028.85000000002
2015-02-13	100783.35000000002
2015-02-14	103102.50000000001
2015-02-15	105243.75000000001
2015-02-16	107212.55000000002
2015-02-17	109334.45000000001
2015-02-18	111977.30000000002
2015-02-19	114007.55000000002
2015-02-20	116898.70000000001
2015-02-21	119009.70000000001
2015-02-22	120589.65000000001
2015-02-23	122758.20000000001
2015-02-24	124952.75000000001
2015-02-25	127294.05000000002
2015-02-26	129555.35000000002
2015-02-27	132413.30000000002

-- determine the top 3 most ordered pizza

```
 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
group by pizza_types.category, pizza_types.name) as a) as b
where rn<=3;
```

Result Grid | Filter Rows: | Exp

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
The Italian Supreme Pizza	33476.75
The Sicilian Pizza	30940.5
The Four Cheese Pizza	32265.70000000065
The Mexicana Pizza	26780.75
The Five Cheese Pizza	26066.5