Hello
This is pizzas sale report

```sql
-- total orders.
select count(order_id) from orders;
```

count(order...
21350

```sql
-- find total sales.
select sum(order_details.quantity*pizzas.price) as Total_revnue
from order_details join pizzas on order_details.pizza_id=pizzas.pizza_id;
```

Total_revnue

817860.049999993

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

name	price
The Barbecue Chicken Pizza	35.95

```sql
-- 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.pizz
GROUP BY pizzas.size
ORDER BY order_count DESC
LIMIT 1;
```

size	order_count
L	18526

```sql
-- Top five pizza types.
SELECT
    pizza_types.name, SUM(order_details.quantity) AS 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 quantity DESC
LIMIT 5;
```

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

```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
    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;
```

category	quantity
Classic	14888
Veggie	11649
Supreme	11987
Chicken	11050

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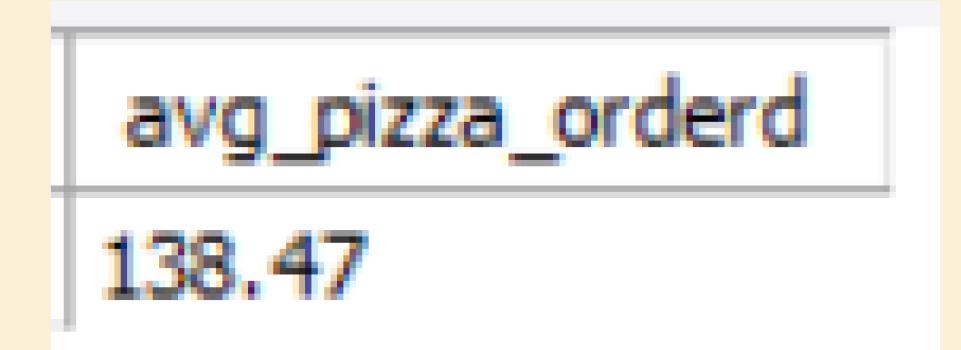
hour	order_count
12	2520
13	2455
18	2399
17	2336
19	2009
16	1920
20	1642
14	1472
15	1468
11	1231
21	1198
22	663
23	28
10	8
9	1

```sql
-- 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

```sql
-- Group the orders by date and calculate the
-- average number of pizzas ordered per day.
SELECT
    ROUND(AVG(quantity), 2) as avg_pizza_orderd
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;
```

avg_pizza_orderd
138.47

```sql
-- Determine the top 3 most ordered pizza types based on revenue.
select pizza_types.name,
sum(order_details.quantity*pizzas.price) as revnue
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 revnue desc limit 3;
```

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

```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 revnue
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 revnue desc;
```

category	revnue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

```sql
-- cumlative revnue generated over time\''
select order_date,
sum(revnue) over(order by order_date) as cum_revnue
from
(select orders.order_date,
sum(order_details.quantity*pizzas.price) as revnue
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;
```

order_date	cum_revnue
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
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

```sql
-- based on renue for each pizza category.
select name, revnue from
(select category,name,revnue,
rank() over(partition by category order by revnue desc) as rn
from
(select pizza_types.category,pizza_types.name,
sum((order_details.quantity)*pizzas.price) as revnue
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;
```

name	revnue
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

Thank You