Pizza Sales Analysis

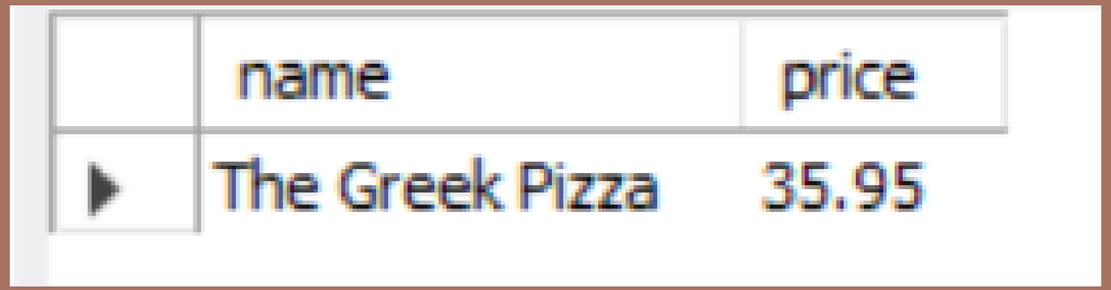
-SQL

-- Identify the highest price pizza.

Coading

```
 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



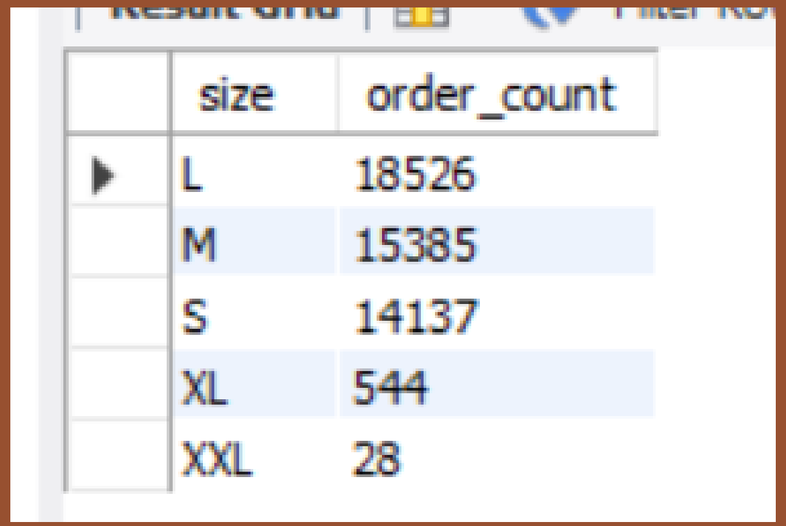
	name	price
▶	The Greek Pizza	35.95

-- identify the most common pizza size order

Coading

```sql
SELECT
    pizzas.size,
    COUNT(order_details.order_detail_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



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

list the top 5 most order pizza types along with the quantity.

Coading

```sql
SELECT
    pizza_types.name, SUM(order_details.quantuty) 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

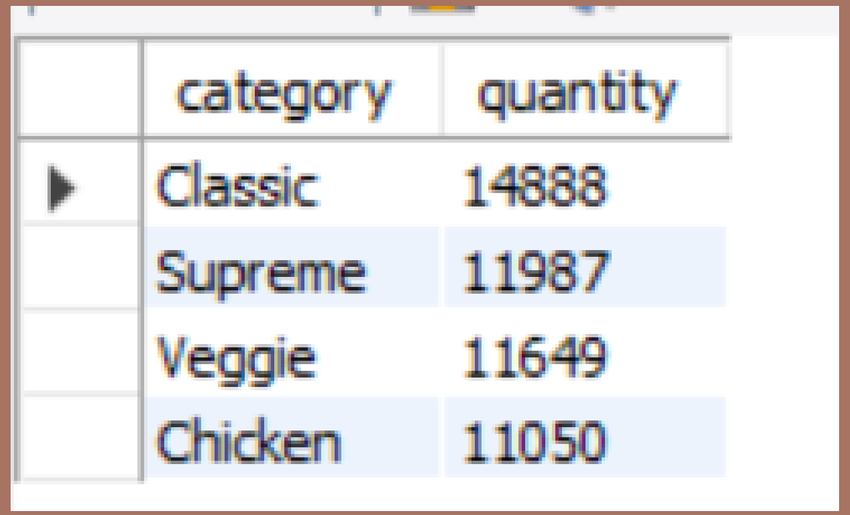
name	quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

join the necessary tables to find the total quantity of each pizza category ordeer.

Coading

```sql
SELECT
    pizza_types.category,
    SUM(order_details.quantuty) 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.category
ORDER BY quantity desc ;
```

Result



category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

determine the distribution of orders by hours of the day.

Coading

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

Result

hours	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

join relevant tables to find the categorywise dristribution of pizzas.

Coading

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

Result

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

group the orders by date and calculate the average no. of pizza order per day.

Coading

```
select round(avg(quantity),0) from
(select orders.order_date, sum(order_details.quantuty) as quantity
from orders join order_details
on orders.order_id = order_details.order_id
group by orders.order_date) as order_quantity;
```

Result

round(avg(quantity),0)
138

determine the top 3 most ordered pizza based on revenue.

Coading

```sql
select pizza_types.name, sum(order_details.quantuty * 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

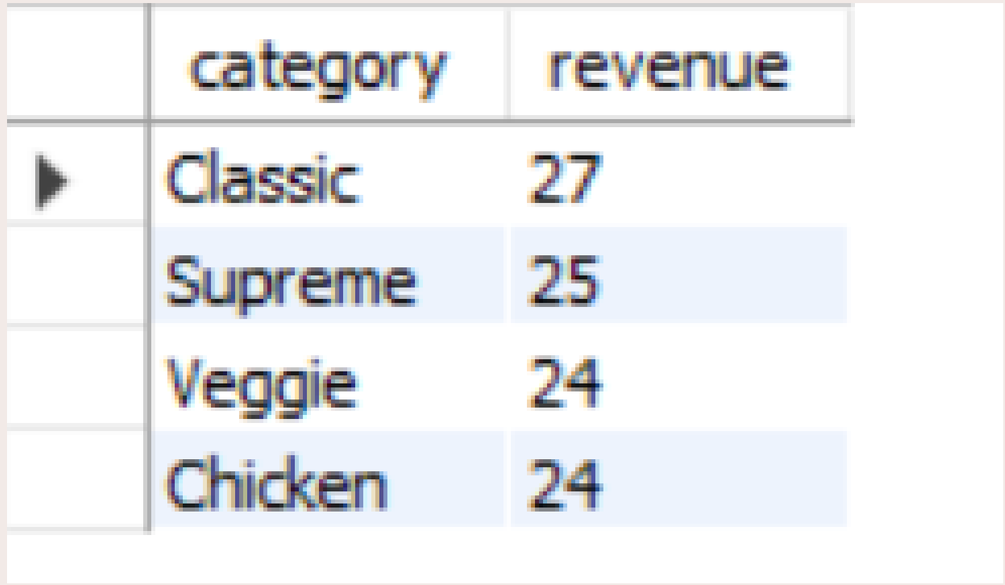
name	revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5

jcalculate the % contribution of each pizza type to total revenue.

Coading

```sql
SELECT
    pizza_types.category,
    ROUND(SUM(pizzas.price * order_details.quantuty) / (SELECT
                    ROUND(SUM(pizzas.price * order_details.quantuty),
                                2) AS total_sales
                FROM
                    pizzas
                        JOIN
                    order_details ON pizzas.pizza_id = order_details.pizza_id) * 100,
            0) AS revenue
FROM
    pizzas
        JOIN
    pizza_types ON pizzas.pizza_type_id = pizza_types.pizza_type_id
        JOIN
    order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizza_types.category
ORDER BY revenue DESC;
```

Result



	category	revenue
▶	Classic	27
	Supreme	25
	Veggie	24
	Chicken	24

Analyze the cumulative revenue generated over time.

Coading

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

Result

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

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

Coading

```sql
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(pizzas.price * order_details.quantuty) as revenue
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, pizza_types.name) as A) as B
where rn <=3 ;
```

Result

	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