1. Retrieve the total number of orders placed.

Code:

```
SELECT count(ORDER_ID) as revenue FROM order_details;
```

Output:



2. Calculate the total revenue generated from pizza sales.

Code:

```
select sum(order_details.quantity*pizzas.price) as total_revenue
from pizzas join order_details
on pizzas.pizza_id=order_details.pizza_id
```

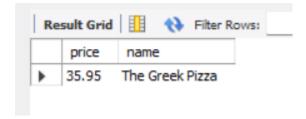
Output:



3. Identify the highest-priced pizza.

Code:

```
select pizzas.price,pizza_types.name
from pizzas join pizza_types
on pizzas.pizza_type_id=pizza_types.pizza_type_id
order by pizzas.price desc limit 1;
```



4. Identify the most common pizza size ordered.

#### Code:

5. List the top 5 most ordered pizza types along with their quantities.

## Code:

```
select sum(order_details.quantity) as most_ordered,pizza_types.name
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 most_ordered desc limit 5;
```

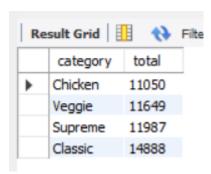


6. Join the necessary tables to find the total quantity of each pizza category ordered.

#### Code:

```
select pizza_types.category,sum(order_details.quantity) as total
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 total;
```

## Output:



7. Determine the distribution of orders by hour of the day.

## Code:

```
select hour(time),count(order_id) from orders group by hour(time);
```

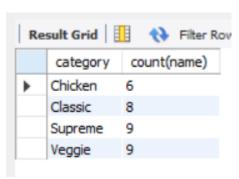


8. Join relevant tables to find the category-wise distribution of pizzas.

# Code:

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

# Output:



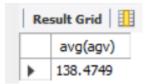
9. Group the orders by date and calculate the average number of pizzas ordered per day.

Code:

```
select avg(agv) from

(select orders.date,sum(order_details.quantity) as agv
from orders join order_details
on orders.order_id=order_details.order_id
group by orders.date ) as order_quantity;
```

## Output:

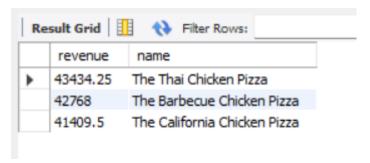


10.Determine the top 3 most ordered pizza types based on revenue.

#### Code:

```
select sum(order_details.quantity * pizzas.price) as revenue,pizza_types.name
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 revenue desc limit 3;
```

# Output:



11. Calculate the percentage contribution of each pizza type to total revenue.

Code:

```
> select pizza_types.category,(sum(order_details.quantity*pizzas.price)/
> (select(round(sum(order_details.quantity*pizzas.price),2) ) as per
- from order_details join pizzas on pizzas.pizza_id=order_details.pizza_id))*100 as rev
- from pizzas join pizza_types
- 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 rev desc;
```

### Output:



12. Analyze the cumulative revenue generated over time.

#### Code:

```
select date,sum(revenue) over(order by date) as cum_revenue
from
(select orders.date,SUM(pizzas.price*order_details.quantity) 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.date) as sales;
```

	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	52724.6000000000006