



#### **Schema**

create table orders(
 order\_id int not null,
order\_date datetime not null,
 order\_time time not null,
 primary key(order\_id)
 );

create table order\_details(
order\_details\_id int not null,
order\_id int not null,
pizza\_id text not null,
quantity int not null,
primary key(order\_details\_id)

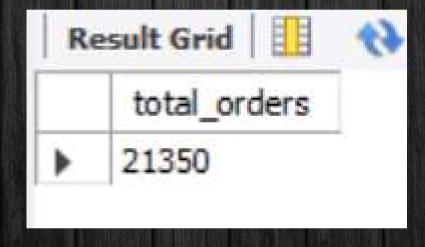
#### **Schema**

create table pizzas(
pizza\_id text not null,
price int not null,
pizza\_type\_id text not null,
size text not null
);

create table pizza\_types(
ingredients text not null,
 name text not null,
 category text not null,
pizza\_type\_id text not null
);

### Retrieve the total number of orders placed.

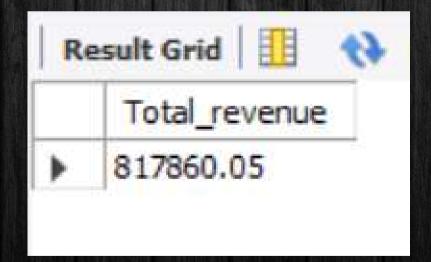
select count(order\_id) as total\_orders from orders;



## Calculate the total revenue generated from pizza sales.

```
SELECT
ROUND(SUM(order_details.quantity * pizzas.price),
2) AS Total_revenue

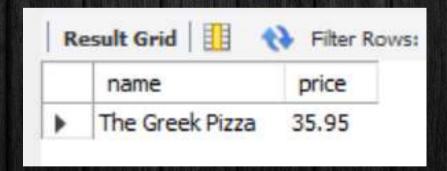
FROM
order_details
JOIN
pizzas ON order_details.pizza_id = pizzas.pizza_id;
```





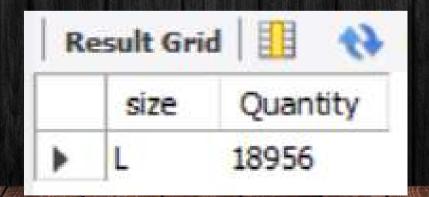
#### Identify the highestpriced pizza.

```
SELECT
pizza_types.name, pizzas.price
FROM
pizza_types
JOIN
pizzas ON pizzas.pizza_type_id =
pizza_types.pizza_type_id
ORDER BY pizzas.price DESC
LIMIT 1;
```



## Identify the most common pizza size ordered.

```
SELECT
pizzas.size, SUM(order_details.quantity) AS Quantity
FROM
pizzas
JOIN
order_details ON pizzas.pizza_id =
order_details.pizza_id
GROUP BY pizzas.size
ORDER BY Quantity DESC
LIMIT 1;
```



## 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 pizzas.pizza_id =
order_details.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

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

```
SELECT

pizza_types.category AS 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 Category
ORDER BY Quantity DESC;
```

R	esult Grid	Filter Rov	re.
	Category	Quantity	
<b>&gt;</b>	Classic	14888	
	Supreme	11987	
	Veggie	11649	
	Chicken	11050	

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

SELECT
HOUR(order\_time) AS Hour\_time,
COUNT(order\_id) AS Number\_of\_orders
FROM
orders
GROUP BY Hour\_time;

	Hour_time	Number_of_orders
•	11	1231
	12	2520
	13	2455
	14	1472
	15	1468
	16	1920
	17	2336
	18	2399
	19	2009



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

SELECT
category, COUNT(name) AS count\_pizza
FROM
pizza\_types
GROUP BY category;

	category	count_pizza
Þ	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9



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

```
SELECT
ROUND(AVG(quantity), 2)

FROM
(SELECT
orders.order_date AS Day,
SUM(order_details.quantity) AS quantity

FROM
orders
JOIN order_details ON orders.order_id =
order_details.order_id
GROUP BY Day) AS order_quantity;
```

round(avg(quantity), 2)

138.47



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

```
SELECT
pizza_types.name AS Pizza_type,
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_type
ORDER BY Revenue DESC limit 3;
```

	Pizza_type	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.

```
SELECT
  pizza_types.category AS Pizza_type,
  SUM(order_details.quantity * pizzas.price) / (SELECT
      ROUND(SUM(order_details.quantity * pizzas.price),
            2) AS Total_revenue
    FROM
      order details
        JOIN
      pizzas ON order_details.pizza_id = pizzas.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_type
ORDER BY Revenue DESC;
```

	Pizza_type	Revenue
٠	Classic	26.90596025566967
	Supreme	25.45631126009862
	Chicken 23.955137556847287	
	Veggie	23.682590927384577

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

```
SELECT
  pizza_types.category AS Pizza_type,
  SUM(order_details.quantity * pizzas.price) / (SELECT
      ROUND(SUM(order_details.quantity * pizzas.price),
            2) AS Total_revenue
    FROM
      order details
        JOIN
      pizzas ON order_details.pizza_id = pizzas.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_type
ORDER BY Revenue DESC;
```

	Pizza_type	Revenue
٠	Classic	26.90596025566967
	Supreme	25.45631126009862
	Chicken 23.955137556847287	
	Veggie	23.682590927384577

### 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 orders on
order\_details.order\_id = orders.order\_id
join pizzas on pizzas.pizza\_id =
order\_details.pizza\_id
group by orders.order\_date) as sales;

	order_date	cum_revenue
١	2015-01-01 00:00:00	2713.8500000000004
	2015-01-02 00:00:00	5445.75
	2015-01-03 00:00:00	8108.15
	2015-01-04 00:00:00	9863.6
	2015-01-05 00:00:00	11929.55
	2015-01-06 00:00:00	14358.5
	2015-01-07 00:00:00	16560.7

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

select category, name, Revenue from

(select name, category, 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 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) b where rn <= 3;

	category	name	Revenue
١	Chicken	The Thai Chicken Pizza	43434.25
	Chicken	The Barbecue Chicken Pizza	42768
	Chicken	The California Chicken Pizza	41409.5
	Classic	The Classic Deluxe Pizza	38180.5
	Classic	The Hawaiian Pizza	32273.25
	Classic	The Pepperoni Pizza	30161.75
	Supreme	The Spicy Italian Pizza	34831.25
	Supreme	The Italian Supreme Pizza	33476.75