

PIZZAHUT

SALES

SQL PROJECT



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;
```

Result Grid	
	total_orders
▶	21350



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;
```

Result Grid	
	Total_revenue
▶	817860.05



Identify the highest-priced 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;
```

Result Grid			Filter Rows:
	name	price	
▶	The Greek Pizza	35.95	



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;
```

Result Grid				
	size	Quantity		
▶	L	18956		



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;
```

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 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;
```

Result Grid			Filter Rows
	Category	Quantity	
▶	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
▶	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
►	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
►	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
▶	2015-01-01 00:00:00	2713.85000000000004
	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
►	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

