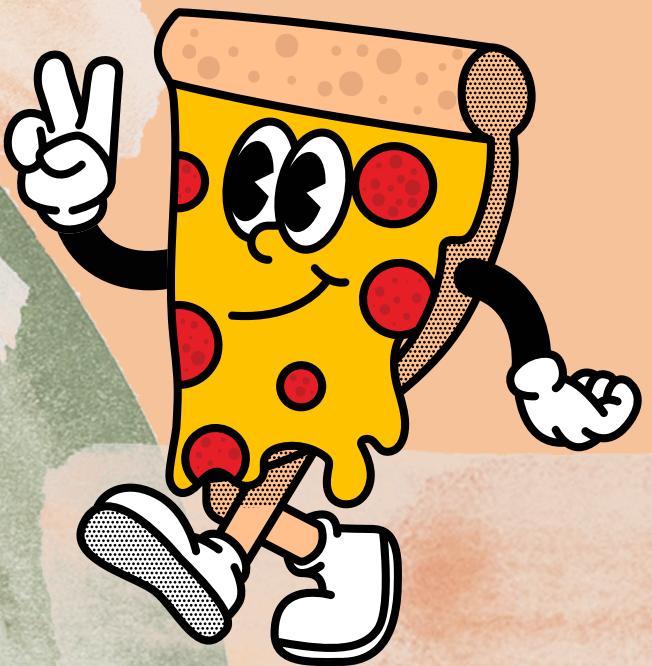


PIZZA SALES ANALYSIS



Objective:



This project aims to analyze pizza sales data, revealing performance and trends within a restaurant by examining the data, it seeks to uncover valuable insights for informed decision making and strategic planning.

I've developed a SQL project delving into pizza sales data uncovering key insights essential for strategic decision making and business enhancement



Database: pizzahut

Tables

orders	order_details	pizzas	pizzas_types
order_id ↩ integer	order_details_id ↩ integer	pizza_id text	pizza_type_id text
order_date date	order_id integer	pizza_type_id text	name text
order_time time	pizza_id text	size text	category text
	quantity integer	price double	ingredients text

Retrieve the total number of orders placed

```
#Retrieve the total number of orders placed.  
  
SELECT  
    COUNT(order_id) AS total_orders_placed  
  
FROM  
    orders;
```



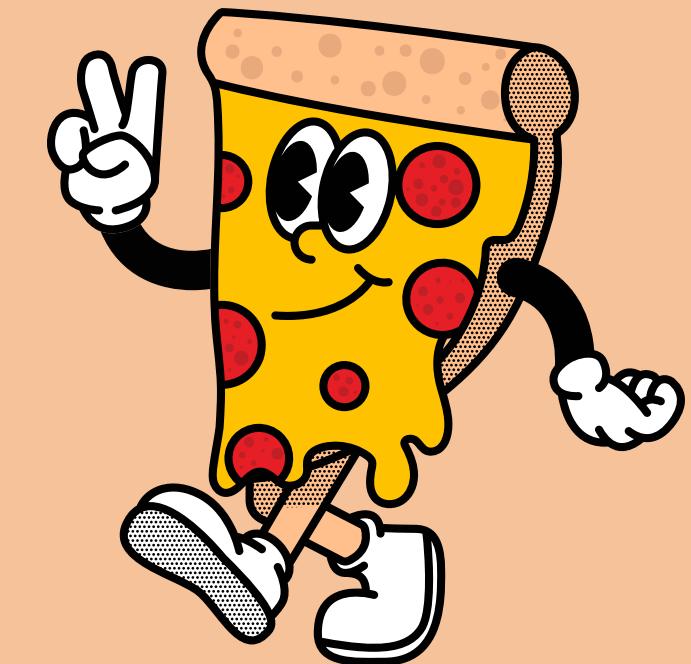
	Result Grid			Filter Rows:
	total_orders_placed			
▶	21350			



Calculate the total revenue generated from pizza sales

```
#Calculate the total revenue generated from pizza sales.
```

```
• SELECT  
    ROUND(SUM(order_details.quantity * pizzas.price),  
          2) AS Total_Revenue  
FROM  
    pizzas  
    INNER JOIN  
    order_details ON order_details.pizza_id = pizzas.pizza_id;
```

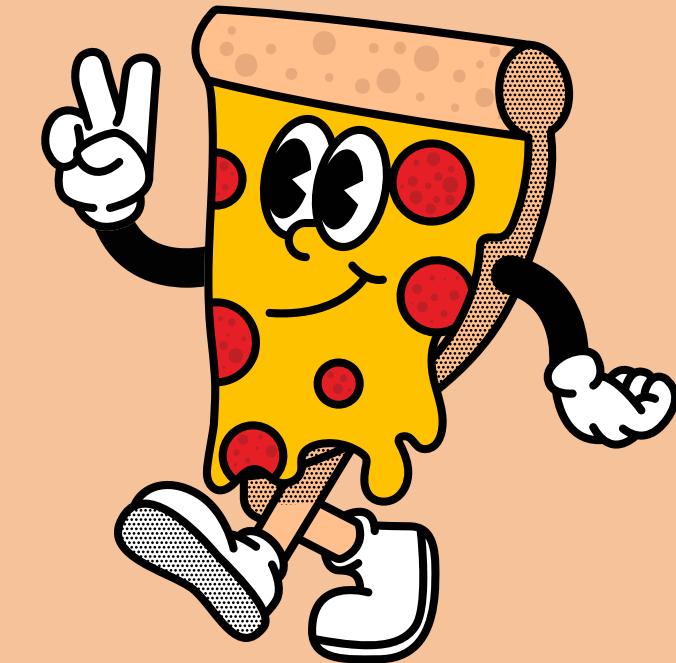


Result Grid	
	Total_Revenue
▶	817860.05

Identify the highest-priced pizza

```
#Identify the highest-priced pizza.
```

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



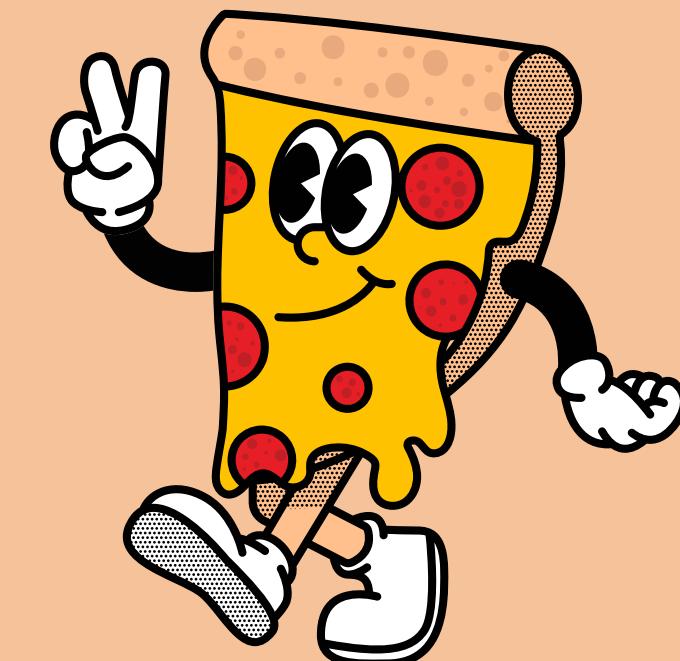
Result Grid | Filter Rows:

	Pizza	Max_priced
▶	The Greek Pizza	35.95

Identify the most common pizza size ordered

```
#Identify the most 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.pizza_id  
GROUP BY pizzas.size  
ORDER BY order_count DESC  
LIMIT 1;
```



Result Grid | Filter

	size	order_count
▶	L	18526

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

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

```
SELECT
```

```
    sum(order_details.quantity) AS Quantity,  
    pizza_types.name AS Top_ordered_pizza
```

```
FROM
```

```
    order_details
```

```
        JOIN
```

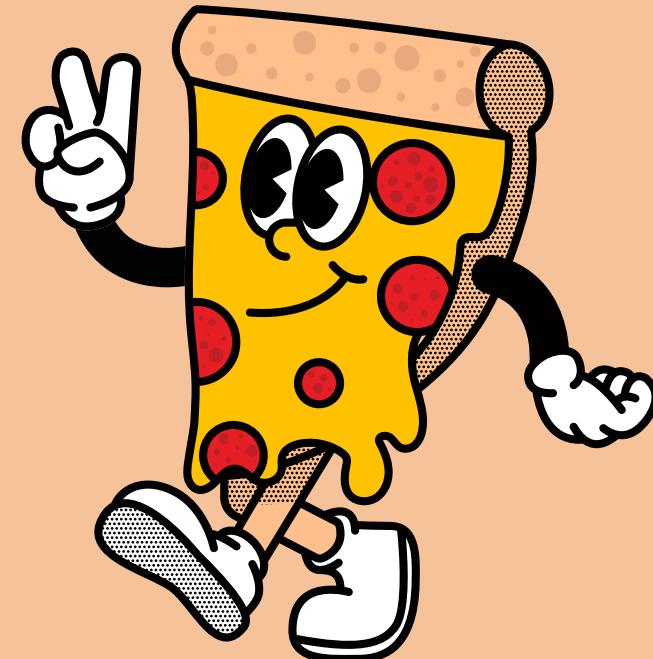
```
    pizzas ON order_details.pizza_id = pizzas.pizza_id
```

```
        JOIN
```

```
    pizza_types ON pizzas.pizza_type_id = pizza_types.pizza_type_id
```

```
GROUP BY pizza_types.name
```

```
ORDER BY Quantity DESC limit 5;
```

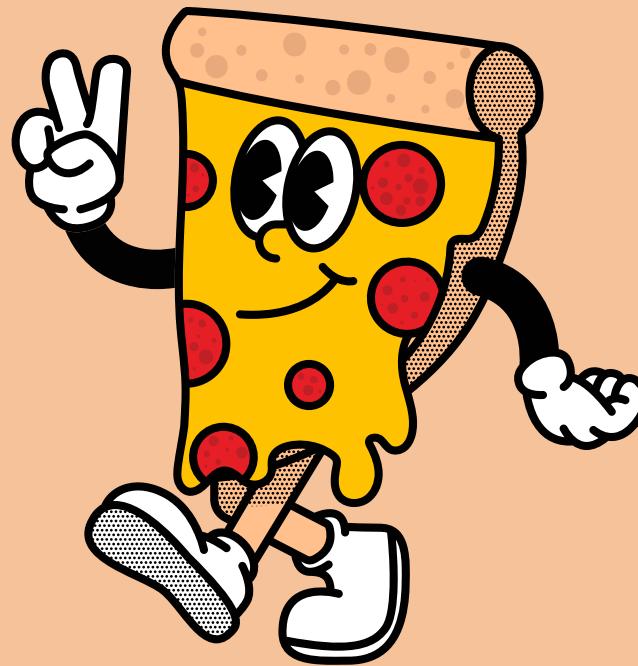


	Quantity	Top_ordered_pizza
▶	2453	The Classic Deluxe Pizza
	2432	The Barbecue Chicken Pizza
	2422	The Hawaiian Pizza
	2418	The Pepperoni Pizza
	2371	The Thai Chicken Pizza

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

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

SELECT
    SUM(order_details.quantity) AS Quantity,
    pizza_types.category AS Category
FROM
    order_details
        JOIN
    pizzas ON order_details.pizza_id = pizzas.pizza_id
        JOIN
    pizza_types ON pizzas.pizza_type_id = pizza_types.pizza_type_id
GROUP BY pizza_types.category;
```



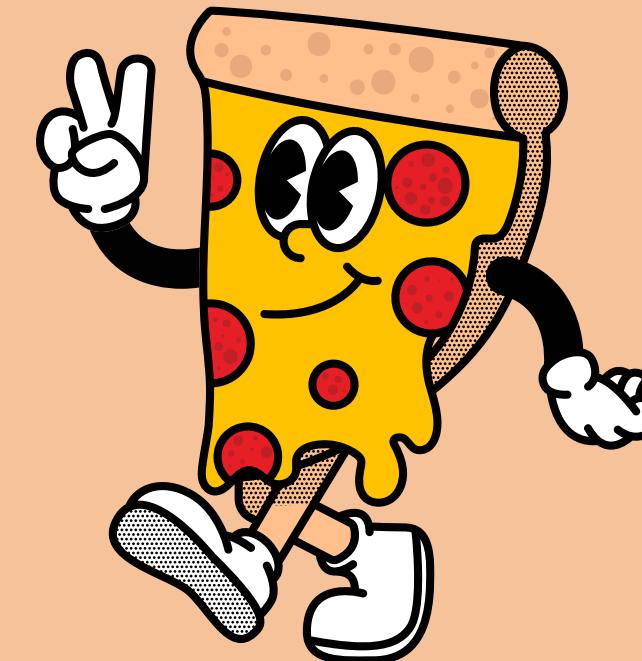
Result Grid | Filter

	Quantity	Category
▶	14888	Classic
▶	11649	Veggie
▶	11987	Supreme
▶	11050	Chicken

Determine the distribution of orders by hour of the day

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

```
SELECT  
    COUNT(orders.order_id) AS Quantity,  
    HOUR(orders.order_time) AS Time  
FROM  
    orders  
GROUP BY Time  
ORDER BY Time;
```

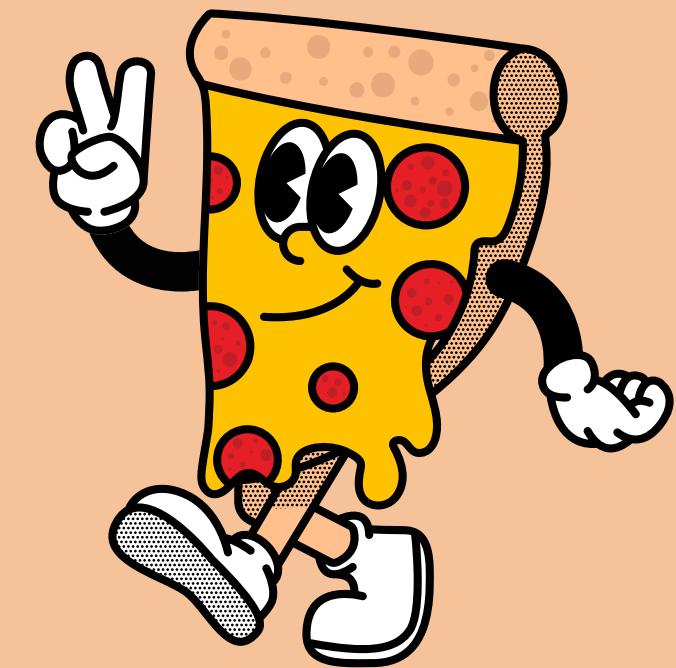


	Quantity	Time
▶	1	9
	8	10
	1231	11
	2520	12
	2455	13
	1472	14
	1468	15
	1920	16
	2336	17
	2399	18

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

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

SELECT
    pizza_types.category, COUNT(pizza_types.name) AS pizza_no
FROM
    pizza_types
GROUP BY pizza_types.category
ORDER BY pizza_no;
```



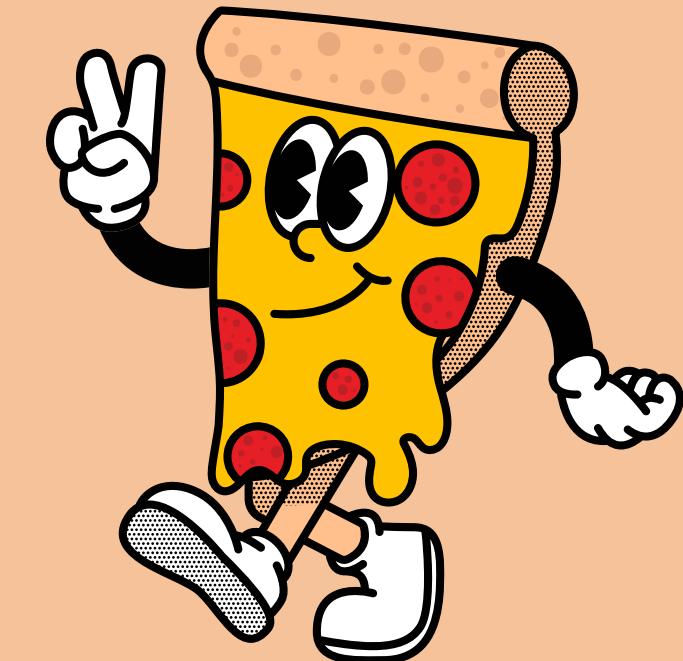
Result Grid | Filter

	category	pizza_no
▶	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9

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

```
-- Group the orders by date and calculate the average number of pizzas ordered per day

SELECT
    ROUND(AVG(Total_pizza_per_day), 0) AS Average_pizza_ordered_per_day
FROM
    (SELECT
        orders.order_date AS Date,
        SUM(order_details.quantity) AS Total_pizza_per_day
    FROM
        orders
    JOIN order_details ON order_details.order_id = orders.order_id
    GROUP BY Date) AS Sales
```

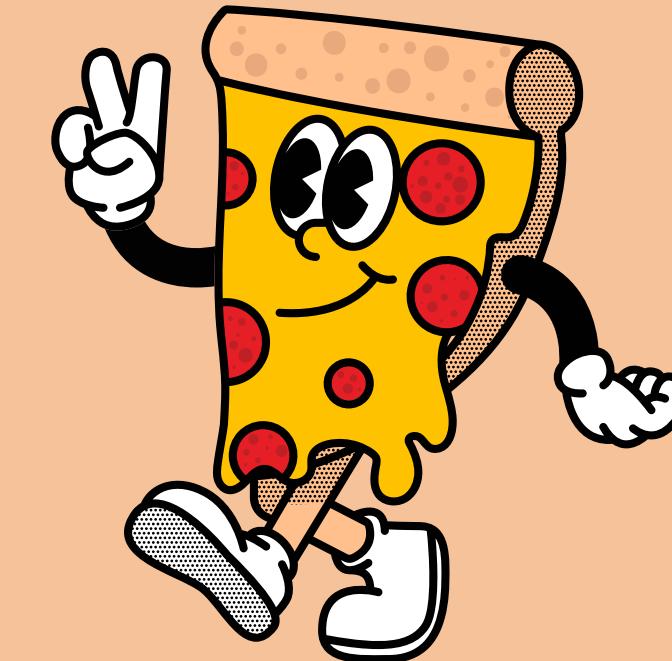


	Average_pizza_ordered_per_day
▶	138

Determine the top 3 most ordered pizza types based on revenue

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

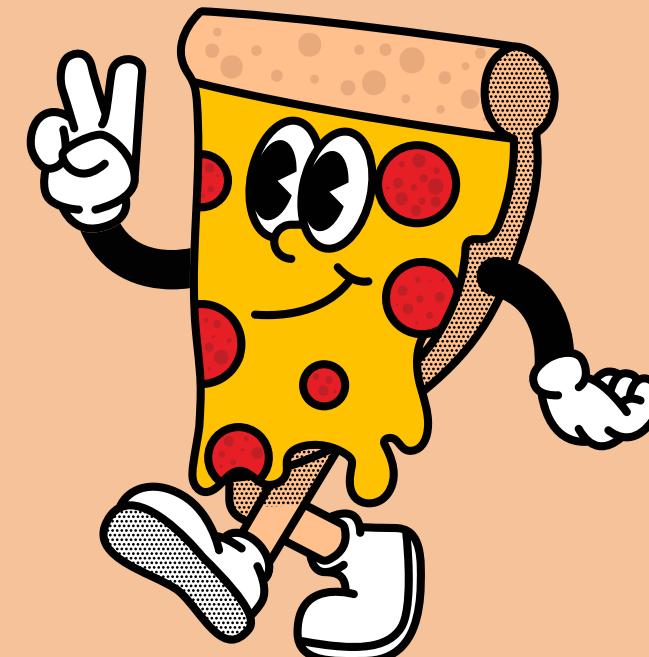
SELECT
    pizza_types.name AS Name_of_pizza,
    ROUND(sum(pizzas.price * order_details.quantity),
        2) AS Revenue
FROM
    pizzas
        JOIN
    pizza_types ON pizzas.pizza_type_id = pizza_types.pizza_type_id
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY Revenue DESC
LIMIT 3;
```



	Name_of_pizza	Revenue
▶	The Thai Chicken Pizza	43434.25
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41409.5

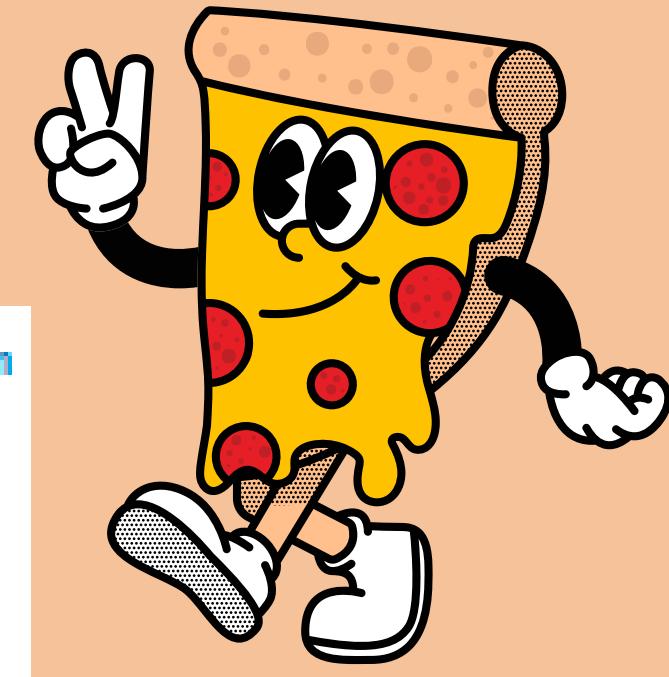
Calculate the percentage contribution of each pizza type to total revenue

```
SELECT
    pizza_types.category AS Category_of_pizza,
    ROUND(((SUM(pizzas.price * order_details.quantity) / (SELECT
        SUM(order_details.quantity * pizzas.price)
    FROM
        pizzas
        INNER JOIN
        order_details ON order_details.pizza_id = pizzas.pizza_id)) * 100),
    2) AS percent_pizza
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 percent_pizza DESC;
```



	Category_of_pizza	percent_pizza
▶	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68

Analyze the cumulative revenue generated over time

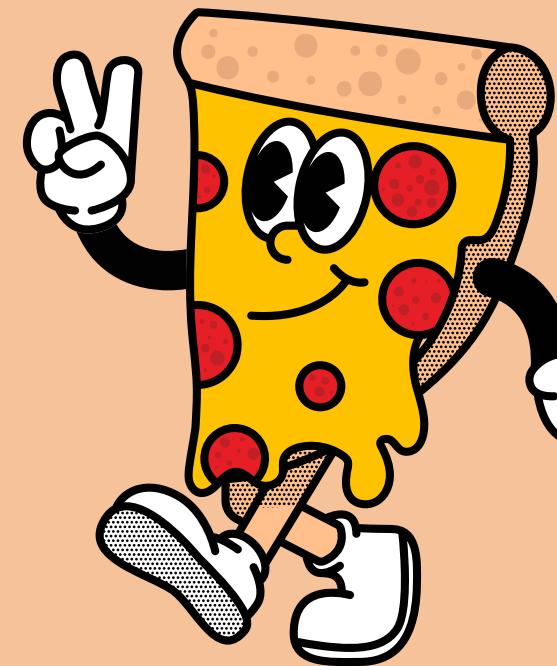


```
select order_date as Date, Amount_per_day,sum(Amount_per_day) over(order by order_date) as Cumulative_Amount from
(SELECT
    orders.order_date,
    Round(SUM(order_details.quantity * pizzas.price),2) AS Amount_per_day
FROM
    orders
    JOIN
    order_details ON orders.order_id = order_details.order_id
    JOIN
    pizzas ON order_details.pizza_id = pizzas.pizza_id
    group by orders.order_date) as Sales;
```

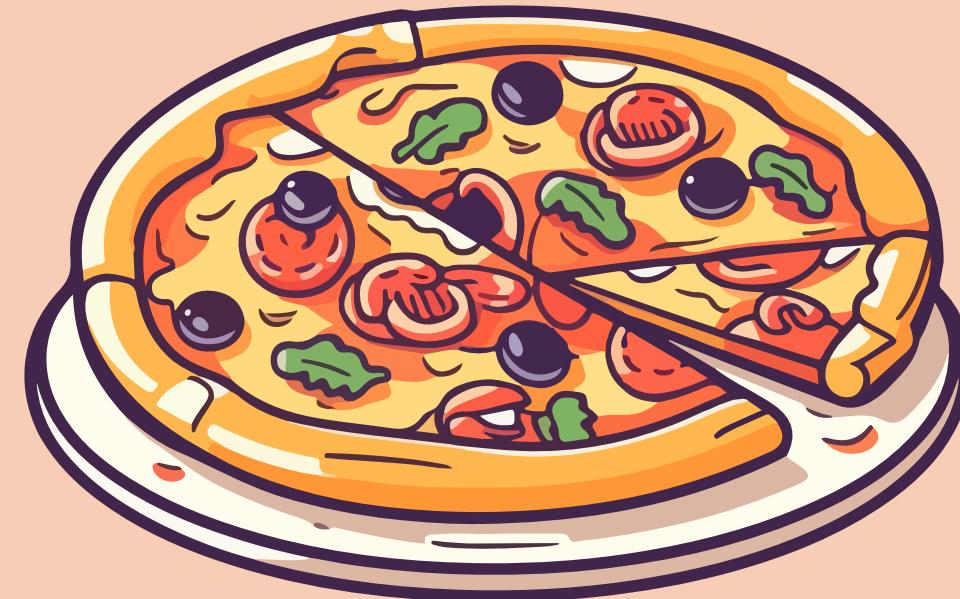
	Date	Amount_per_day	Cumulative_Amount
▶	2015-01-01	2713.85	2713.85
	2015-01-02	2731.9	5445.75
	2015-01-03	2662.4	8108.15
	2015-01-04	1755.45	9863.6
	2015-01-05	2065.95	11929.55
	2015-01-06	2428.95	14358.5
	2015-01-07	2202.2	16560.7
	2015-01-08	2838.35	19399.05
	2015-01-09	2127.35	21526.399999999998
	2015-01-10	2463.95	23990.35
	2015-01-11	1872.3	25862.649999999998

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

```
select category, name , revenue, rank_per_category from
(select category, name,revenue, rank() over (partition by category order by revenue desc) as rank_per_category from
(SELECT
    pizza_types.category,
    pizza_types.name,
    sum(pizzas.price * order_details.quantity) 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,pizza_types.category) as a) as b
where rank_per_category<=3;
```



	category	name	revenue	rank_per_category
▶	Chicken	The Thai Chicken Pizza	43434.25	1
	Chicken	The Barbecue Chicken Pizza	42768	2
	Chicken	The California Chicken Pizza	41409.5	3
	Classic	The Classic Deluxe Pizza	38180.5	1
	Classic	The Hawaiian Pizza	32273.25	2
	Classic	The Pepperoni Pizza	30161.75	3
	Supreme	The Spicy Italian Pizza	34831.25	1
	Supreme	The Italian Supreme Pizza	33476.75	2
	Supreme	The Sicilian Pizza	30940.5	3
	Veggie	The Four Cheese Pizza	32265.70000000065	1
	Veggie	The Mexicana Pizza	26780.75	2



THANK YOU

