

# PIZZA SALES ANALYSIS USING SQL







**HELLO!!!**

**I am Ayush Jain, In this project i have utilized SQL queries to solve the questions those are related to the pizza sales.**



# OBJECTIVE

**This Project looks at pizza sales numbers to find out how well restaurant is doing and what trends there are. This information is used to make smarter decisions and plan better for the future.**



# 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_sales
```

FROM

```
order_details
```

JOIN

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

Result Grid

	total_sales
▶	817860.05

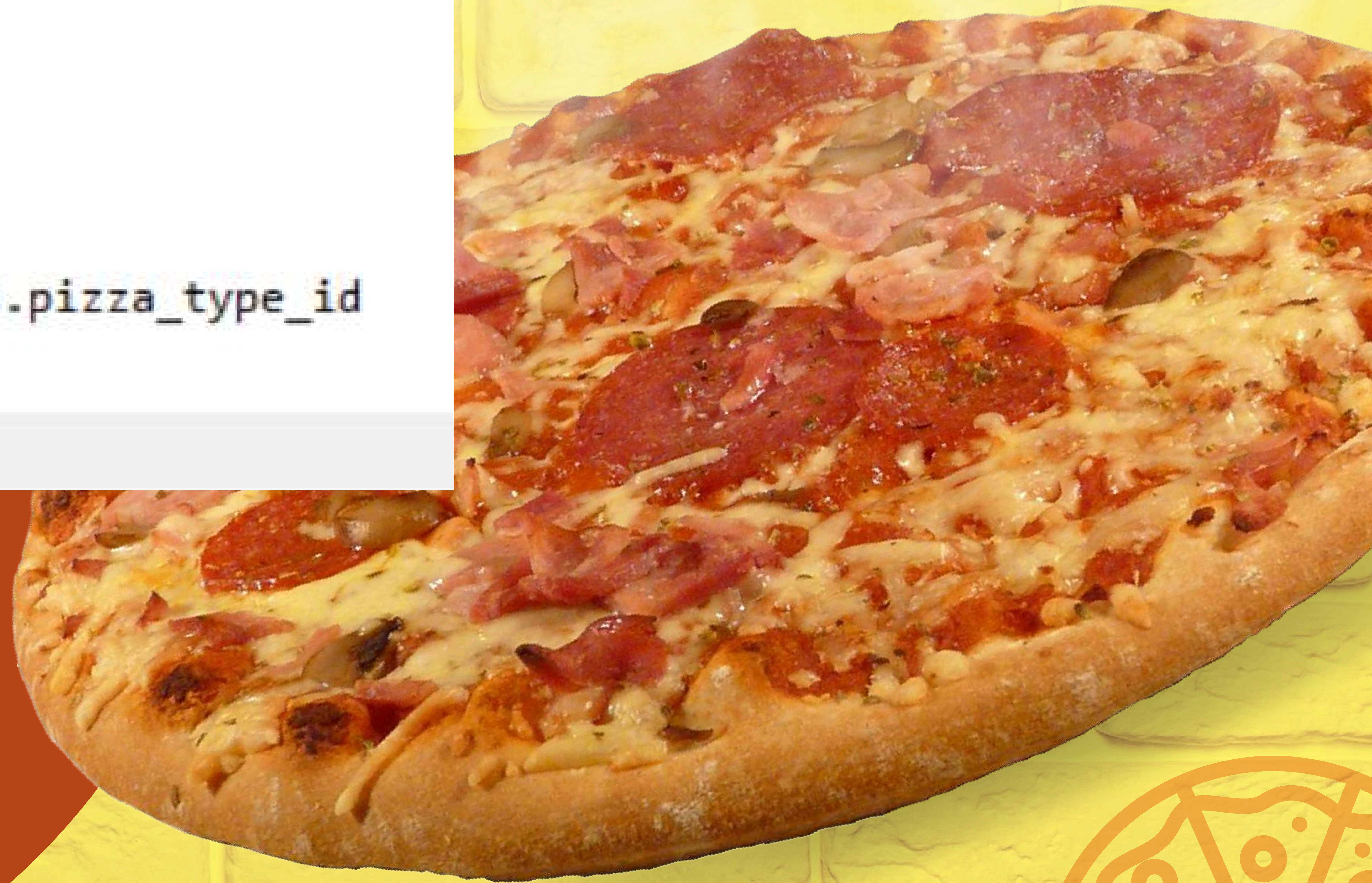




# IDENTIFY THE HIGHEST-PRICED PIZZA.

```
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 Grid			Filter Rows
	name	price	
▶	The Greek Pizza	35.95	





# 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;
```

Result Grid			Filter
	size	order_count	
▶	L	18526	
	M	15385	
	S	14137	
	XL	544	
	XXL	28	





# 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 order_details.pizza_id = pizzas.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,  
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 pizza_types.category order by quantity desc;
```

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, COUNT(order_id) AS order_count
FROM
    orders
GROUP BY HOUR(order_time);
```

hour	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
23	28



# JOIN RELEVANT TABLES TO FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS.

```
SELECT  
    category, COUNT(name)  
FROM  
    pizza_types  
GROUP BY category;
```

category	count(name)
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), 0) AS avg_pizza_ordered_per_day
FROM
    (SELECT
        orders.order_date, SUM(order_details.quantity) AS quantity
    FROM
        orders
    JOIN order_details ON orders.order_id = order_details.order_id
    GROUP BY orders.order_date) AS order_quantity;
```

avg_pizza_ordered_per_day
138





# DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE.

```
SELECT
  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.name
ORDER BY revenue DESC
LIMIT 3;
```

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

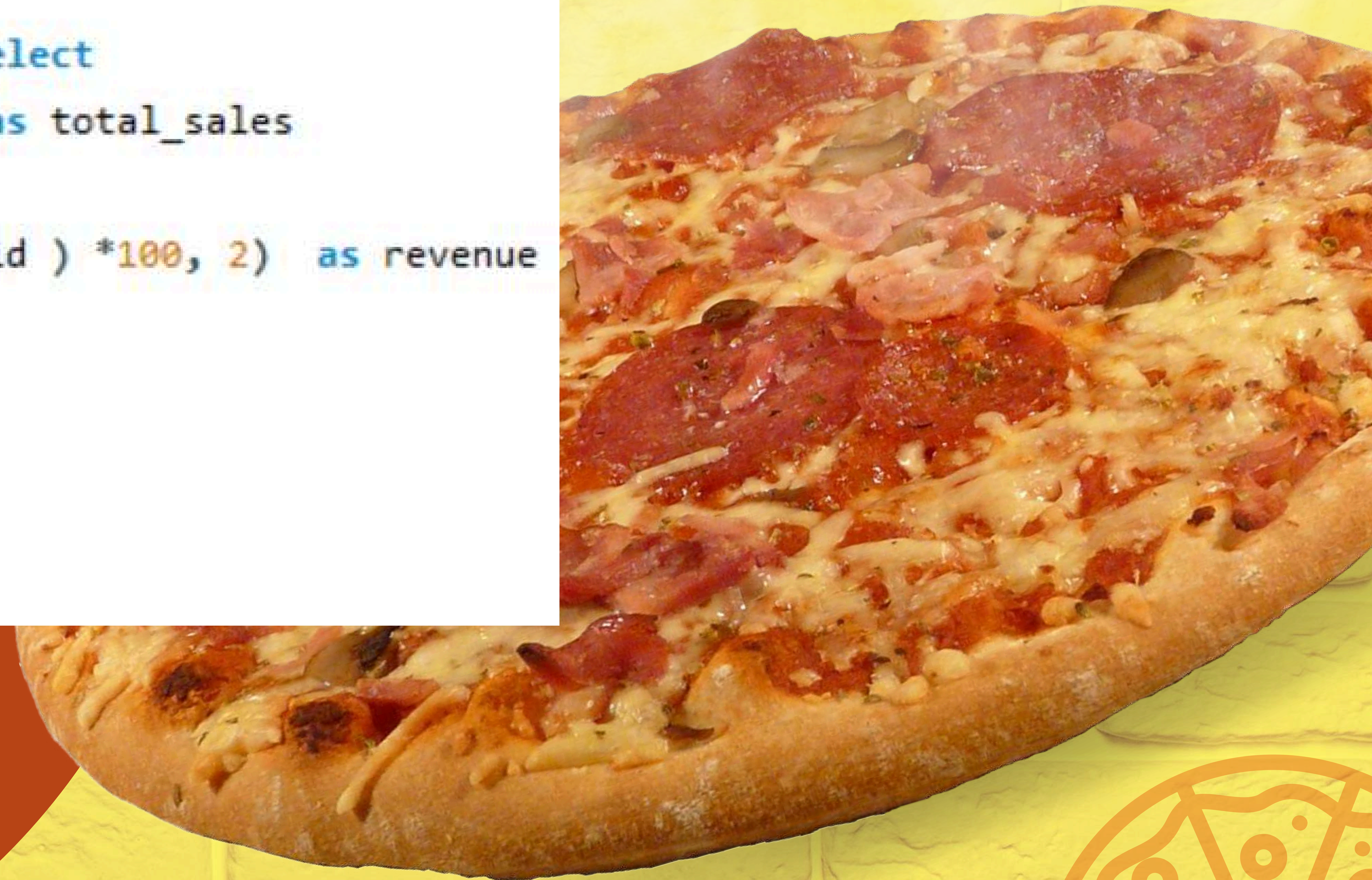




# CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE.

```
select pizza_types.category,  
round(sum(order_details.quantity * pizzas.price) / (select  
round(sum(order_details.quantity * pizzas.price), 2) as total_sales  
from order_details  
join pizzas on pizzas.pizza_id = order_details.pizza_id ) *100, 2) 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.category order by revenue desc;
```

category	revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68





# 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 pizzas  
on order_details.pizza_id = pizzas.pizza_id  
join orders  
on orders.order_id = order_details.order_id  
group by orders.order_date) as sales;
```

order_date	cum_revenue
2015-01-01	2713.85000000000004
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	23990.3500000000002
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.3000000000003
2015-01-14	32358.7000000000004
2015-01-15	34343.500000000001
2015-01-16	36937.650000000001



# DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY.

```
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((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_types.category, pizza_types.name) as a) as b
where rn<=3;
```

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
The Pepperoni Pizza	30161.75
The Spicy Italian Pizza	34831.25
The Italian Supreme Pizza	33476.75
The Sicilian Pizza	30940.5
The Four Cheese Pizza	32265.70000000065
The Mexicana Pizza	26780.75
The Five Cheese Pizza	26066.5