

Pizza Sales

An SQL Case Study

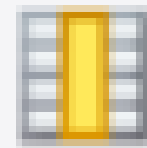


**Retrieve the total number
of orders placed.**



```
SELECT  
    count(order_id) as total_orders  
FROM  
    orders;
```

Result Grid



Filter Rows:

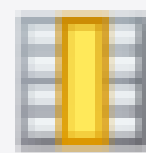
	total_orders
▶	21350

**Calculate the total revenue
generated from pizza sales.**



```
SELECT
    SUM(order_details.quantity * pizzas.price) AS total_revenue
FROM
    order_details
    JOIN
    pizzas ON order_details.pizza_id = pizzas.pizza_id;
```

Result Grid



Filter Rows:

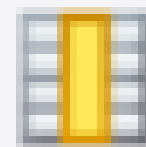
	total_revenue
▶	817860.0499999993

**Identify the highest-priced
pizza.**



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

Result Grid



Filter Rows:

	name	price
▶	The Greek Pizza	35.95

**Identify the most common
pizza size ordered.**



```
SELECT
    size, COUNT(order_details_id)
FROM
    pizzas
    JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY size
ORDER BY size;
```

Result Grid





Filter Rows:

	size	COUNT(order_details_id)
▶	L	18526
	M	15385
	S	14137
	XL	544
	XXL	28

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



```
SELECT
    name, SUM(quantity)
FROM
    pizzas
    JOIN
    pizza_types ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY name
ORDER BY SUM(quantity) DESC
LIMIT 5;
```


Result Grid |   Filter Rows:

	name	SUM(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
    category, SUM(quantity)
FROM
    pizzas
    JOIN
    pizza_types 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 SUM(quantity) DESC;
```

Result Grid



Filter Rows:

	category	SUM(quantity)
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

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



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

Result Grid



Filter Rows:

	HOUR(order_time)	COUNT(order_id)
▶	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
	10	8
	9	1

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



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

Result Grid



Filter Rows:

	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
    order_date, COUNT(order_id)
FROM
    orders
GROUP BY order_date;
```

Result Grid



Filter Rows:

	order_date	COUNT(order_id)
▶	2015-01-01	69
	2015-01-02	67
	2015-01-03	66
	2015-01-04	52
	2015-01-05	54
	2015-01-06	64
	2015-01-07	58
	2015-01-08	72
	2015-01-09	62
	2015-01-10	65
	2015-01-11	52
	2015-01-12	55

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



```
SELECT
    name,
    SUM(order_details.quantity * pizzas.price) AS total_revenue
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
    JOIN
    orders ON orders.order_id = order_details.order_id
GROUP BY name
ORDER BY total_revenue DESC
LIMIT 3;
```

Result Grid



Filter Rows:

	name	total_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,  
       (SUM(order_details.quantity * pizzas.price) /  
        total_revenue.total * 100) AS total_revenue  
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  
JOIN orders ON orders.order_id = order_details.order_id  
CROSS JOIN ( SELECT SUM(order_details.quantity * pizzas.price)  
              AS total  
            FROM order_details  
              JOIN pizzas ON order_details.pizza_id = pizzas.pizza_id  
            ) AS total_revenue  
GROUP BY pizza_types.category, total_revenue.total  
ORDER BY total_revenue DESC;
```

Result Grid



Filter Rows:

	category	total_revenue
▶	Classic	26.905960255669903
	Supreme	25.45631126009884
	Chicken	23.955137556847493
	Veggie	23.682590927384783

**Analyze the cumulative
revenue generated over
time.**



```
select order_date, sum(total_revenue) over(order by order_date)
      as cumulative_revenue
from (
  select orders.order_date, sum(order_details.quantity * pizzas.price)
      as total_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;
```

Result Grid



Filter Rows:

	order_date	cumulative_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

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



```
SELECT name, total_revenue
FROM (SELECT category, name, total_revenue,
      RANK() OVER (PARTITION BY category ORDER BY
        total_revenue DESC) AS revenue_rank
  FROM (SELECT pizza_types.category, pizza_types.name,
        SUM(order_details.quantity * pizzas.price)
        AS total_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 revenue_rank ≤ 3;
```


Result Grid



Filter Rows:

Export:



Write

	category	name	total_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
	Supreme	The Sicilian Pizza	30940.5
	Veggie	The Four Cheese Pizza	32265.70000000065
	Veggie	The Mexicana Pizza	26780.75
	Veggie	The Five Cheese Pizza	26066.5

Thank
you