



SQL CASE STUDY ON

PIZZA SALES



RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED

#Retrieve the total number of orders placed.

```
SELECT COUNT(order_id) AS total_orders FROM orders;
```

	total_orders
▶	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_sales  
FROM order_details JOIN pizzas  
ON pizzas.pizza_id = order_details.pizza_id;
```



	total_sales
▶	817860.05

IDENTIFY THE HIGHEST PRICED PIZZA

#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 price DESC  
LIMIT 1;
```

	name	price
▶	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;
```

	size	order_count
▶	L	18526

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

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

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

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

HOUR	ORDERS
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

FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS

```
#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



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

```
SELECT AVG(quantity) AS Avg_orders 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_perdate;
```

	Avg_orders
▶	138.4749





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, 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

#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;
```

	category	REVENUE
▶	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68

ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME

```
#Analyze the cumulative revenue generated over time.
```

```
SELECT order_date, SUM(REVENUE) OVER(ORDER BY order_date) AS CUM_REV 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 REV;
```

	order_date	CUM_REV
	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

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

```
#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