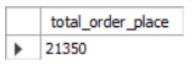# Pizza Sale Analysis

QUESTIONS AND ANSWERS

Q1 Retrieve the total number of orders placed.

```sql
SELECT
    COUNT(order_id) AS total_order_place
FROM
    orders;
```

	total_order_place
▶	21350

Q2 Calculate the total revenue generated from pizza sales.

```sql
SELECT * FROM pizza.order_details;
SELECT
    ROUND(sum(order_details.quantity * pizzas.price),2) as total_revenue
FROM
    order_details
join pizzas
on pizzas.pizza_id = order_details.pizza_id;
```

	total_revenue
▶	817860.05

Q3 Identify the highest-priced pizza.

```sql
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;
```

	name	price
▶	The Greek Pizza	35.95

Q4 Identify the most common pizza size ordered.

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

size	COUNT(order_details.quantity)
M	15385
L	18526
S	14137
XL	544
XXL	28

Q5 List the top 5 most ordered pizza types along with their quantities.

```sql
SELECT
    pizza_types.name, SUM(order_details.quantity) AS total
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 total DESC
LIMIT 5;
```

name	total
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

Q6 Join the necessary tables to find the total quantity of each pizza category ordered.

```sql
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

Q7 Determine the distribution of orders by hour of the day.

```sql
SELECT
    HOUR(time) AS hours, COUNT(order_id) AS total_order
FROM
    orders
GROUP BY hours
ORDER BY total_order DESC;
```
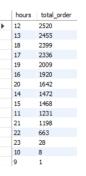
	hours	total_order
▶	12	2520
	13	2455
	18	2399
	17	2336
	19	2009
	16	1920
	20	1642
	14	1472
	15	1468
	11	1231
	21	1198
	22	663
	23	28
	10	8
	9	1

Q8 Join relevant tables to find the category-wise distribution of pizzas.

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

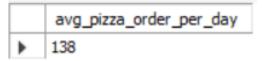|	category	total_pizza
▶	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9

Q9 Group the orders by date and calculate the average number of pizzas ordered per day.

```sql
SELECT
    ROUND(AVG(total_order),0) as avg_pizza_order_per_day
FROM
    (SELECT
        orders.date, SUM(order_details.quantity) AS total_order
    FROM
        order_details
    JOIN orders ON order_details.order_id = orders.order_id
    GROUP BY orders.date
    ORDER BY total_order DESC) AS order_quantity;
```

avg_pizza_order_per_day
138

Q10 Determine the top 3 most ordered pizza types based on revenue.

```sql
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