Question 11: Calculate the percentage contribution of each pizza type to total revenue.
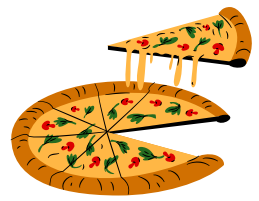
```sql
SELECT
    pizza_types.category,
    ROUND(SUM(order_details.quantity * pizzas.price) / (SELECT
                    ROUND(SUM(order_details.quantity * pizzas.price),
                        2) AS total_sales
            FROM
                order_details
                    JOIN
                pizzas ON pizzas.pizza_id = order_details.pizza_id) * 100,
            2) AS revenue
FROM
    pizza_types
        JOIN
    pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY revenue DESC;
```

Output:

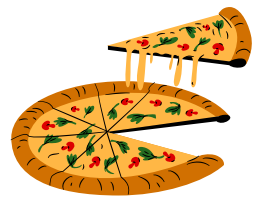| category	revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

Advanced Problem Queries

Question 12: Analyze the cumulative revenue generated over time.

```sql
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;
```

Output:

order_date	cum_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

Question 13: Determine the top 3 most ordered pizza types based on revenue for each pizza category;

```sql
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;
```

Output:

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