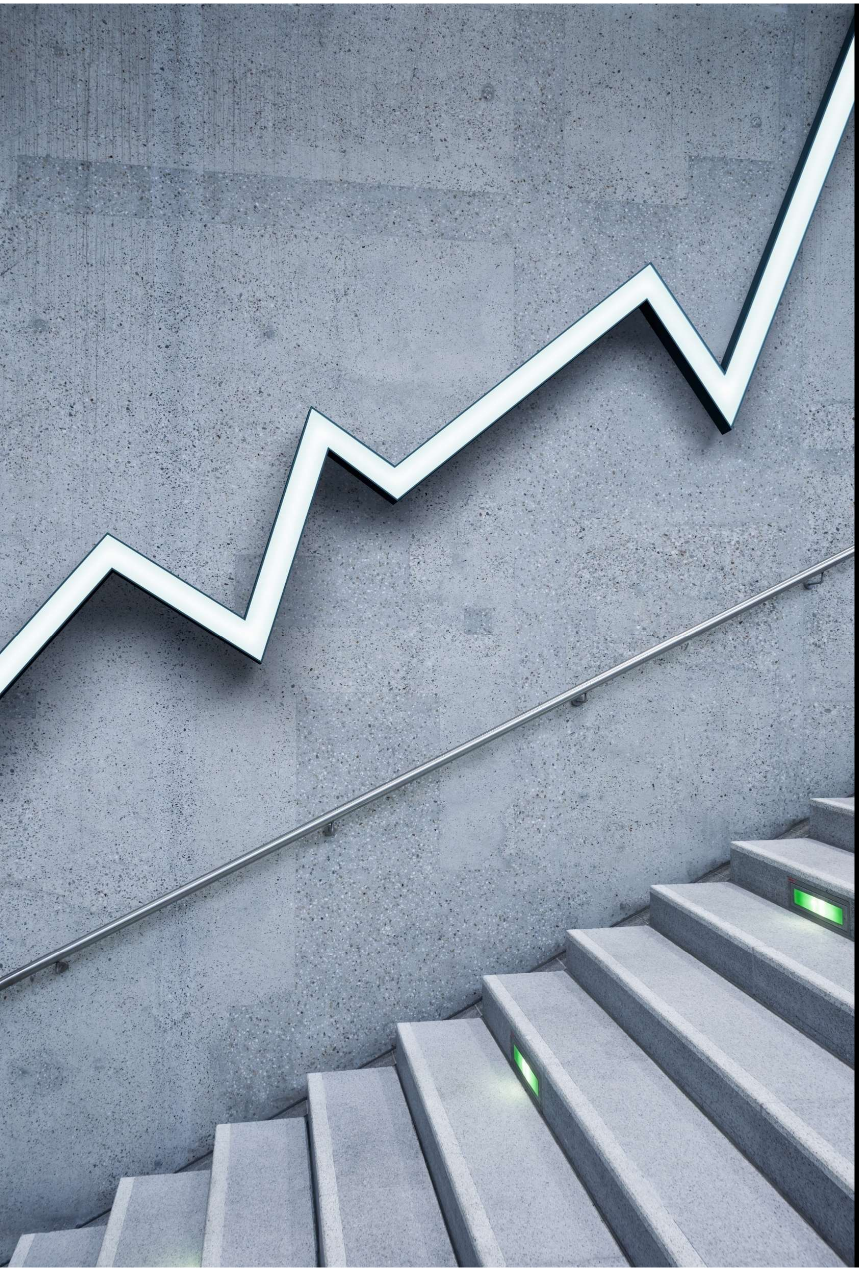
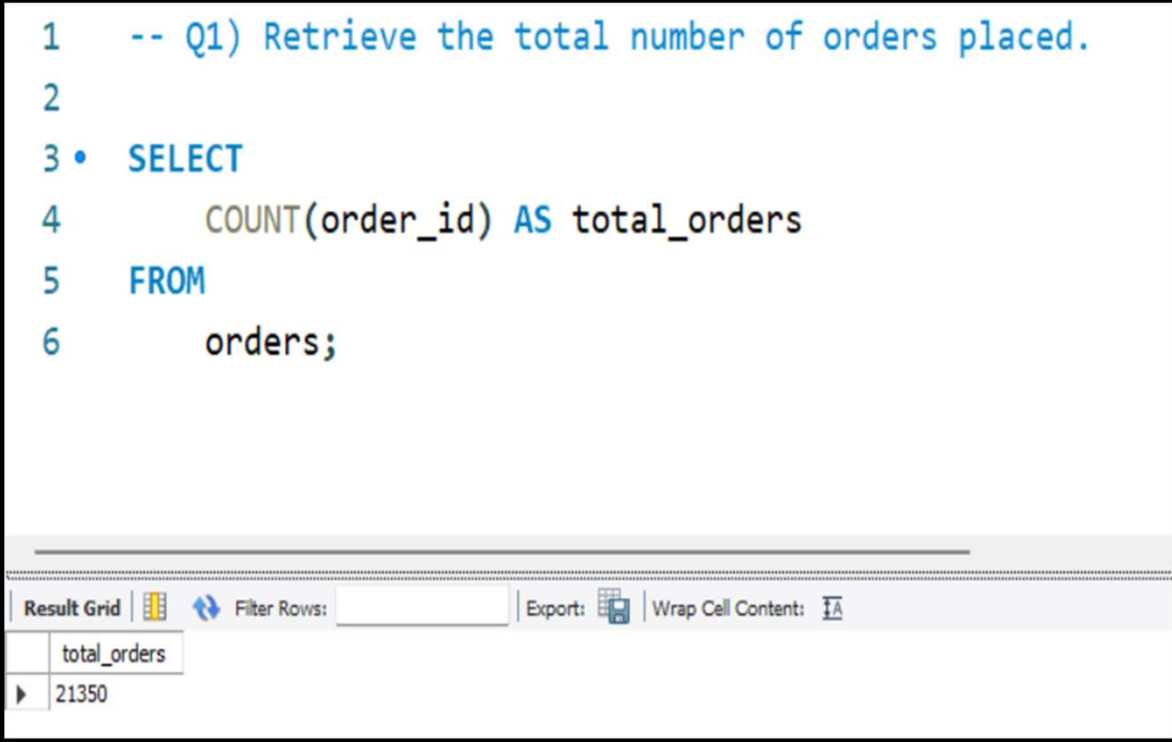


SQL PORTFOLIO PROJECT

AAYUSH JOSHI

Q1) Retrieve the total number of orders placed.

SELECT COUNT(order_id) AS total_orders FROM   orders;

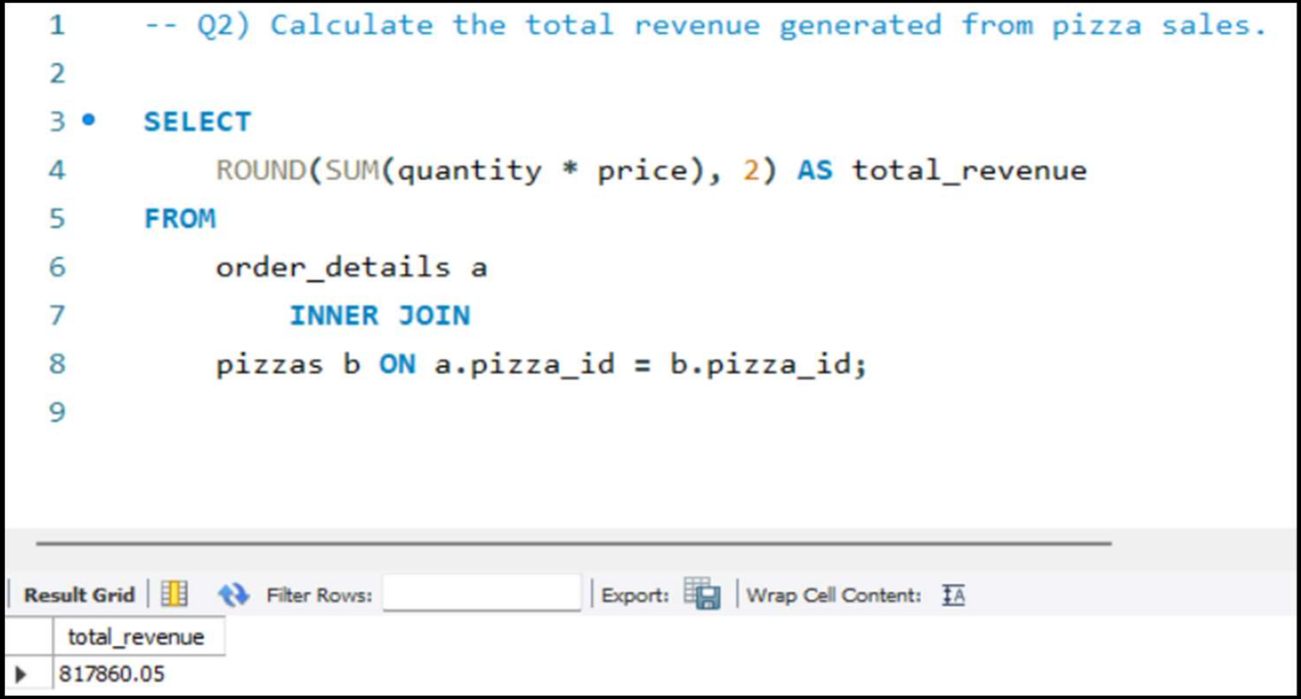


```
-- Q1) Retrieve the total number of orders placed.

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

```
total_orders
21350
```

Q2) Calculate the total revenue generated from pizza sales.

SELECT ROUND(SUM(quantity * price), 2) AS total_revenue FROM order_details a INNER JOIN   pizzas b ON a.pizza_id = b.pizza_id;

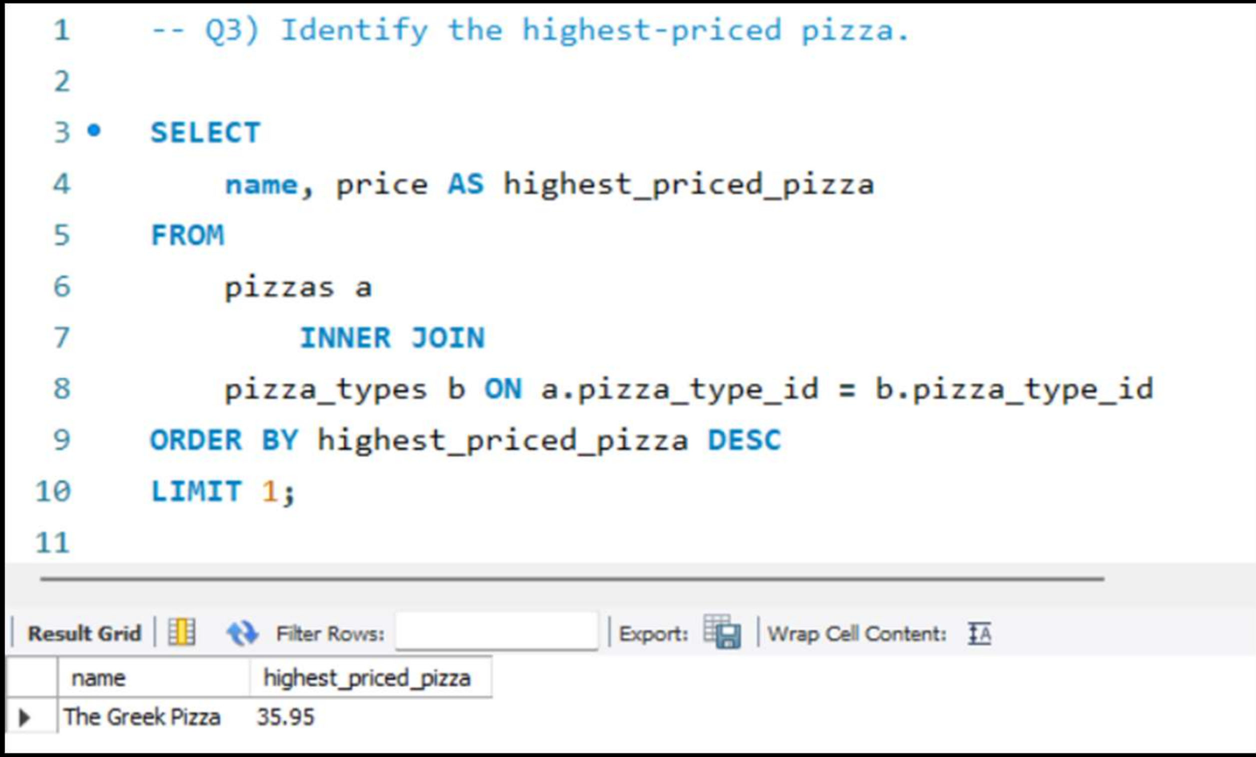


```
-- Q2) Calculate the total revenue generated from pizza sales.

SELECT
    ROUND(SUM(quantity * price), 2) AS total_revenue
FROM
    order_details a
        INNER JOIN
    pizzas b ON a.pizza_id = b.pizza_id;

```

```
total_revenue
817860.05
```

Q3) Identify the highest-priced pizza.

SELECT name, price AS highest_priced_pizza FROM pizzas a INNER JOIN pizza_types b ON a.pizza_type_id = b.pizza_type_id ORDER BY highest_priced_pizza DESC LIMIT 1;

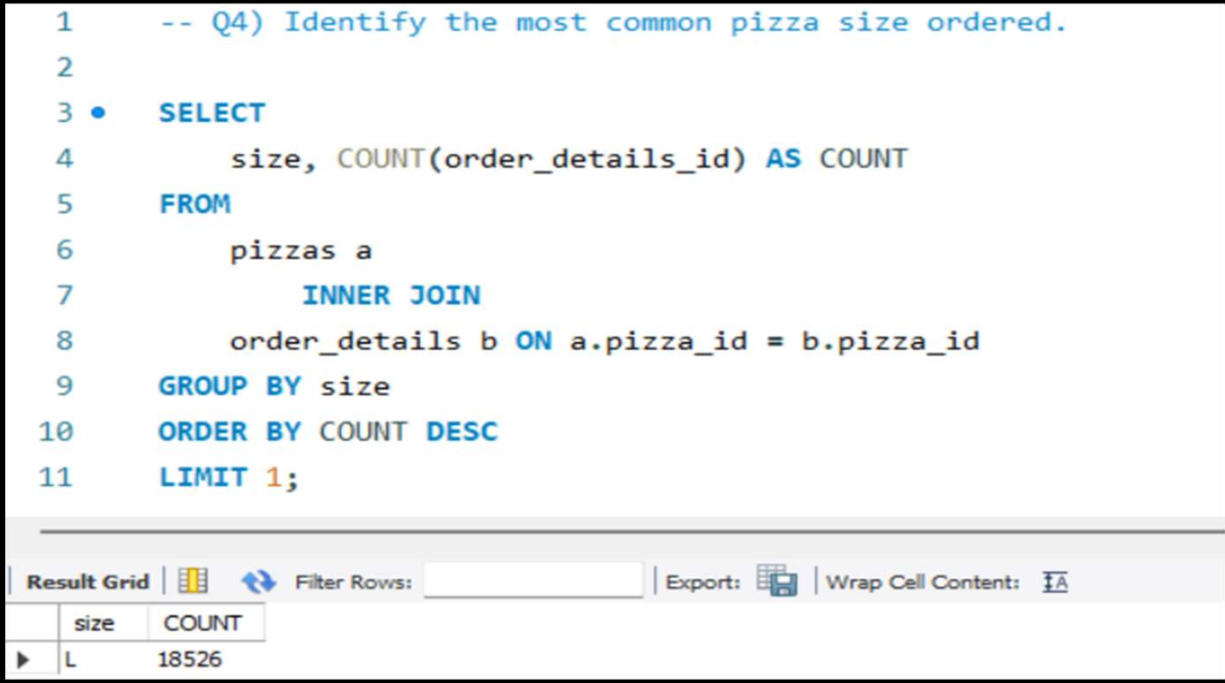


```
-- Q3) Identify the highest-priced pizza.

SELECT
    name, price AS highest_priced_pizza
FROM
    pizzas a
        INNER JOIN
    pizza_types b ON a.pizza_type_id = b.pizza_type_id
ORDER BY highest_priced_pizza DESC
LIMIT 1;
```

name	highest_priced_pizza
The Greek Pizza	35.95

Q4) Identify the most common pizza size ordered.

SELECT size, COUNT(order_details_id) AS COUNT FROM pizzas a INNER JOIN order_details b ON a.pizza_id = b.pizza_id GROUP BY size ORDER BY COUNT DESC LIMIT 1;

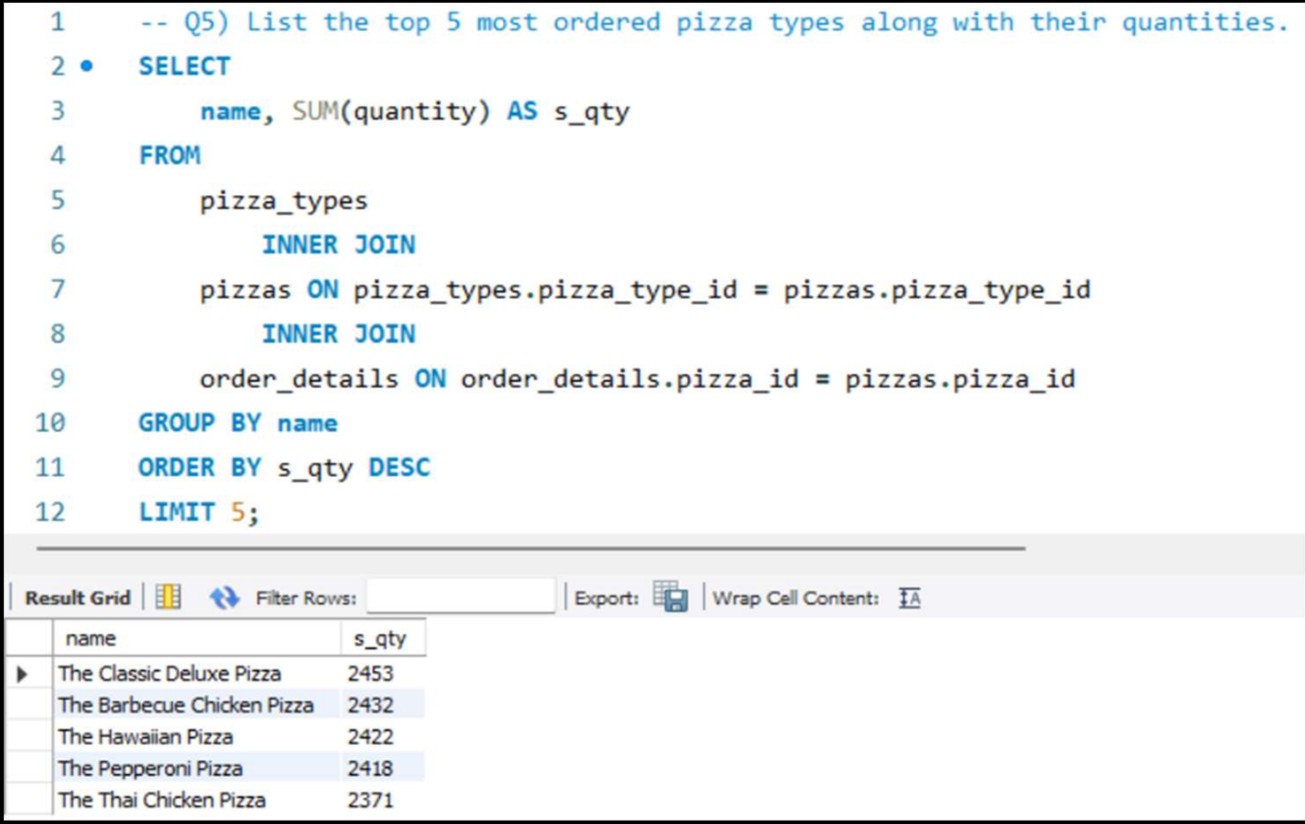


```
-- Q4) Identify the most common pizza size ordered.

SELECT
    size, COUNT(order_details_id) AS COUNT
FROM
    pizzas a
        INNER JOIN
    order_details b ON a.pizza_id = b.pizza_id
GROUP BY size
ORDER BY COUNT DESC
LIMIT 1;
```

```
size  COUNT
L     18526
```

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

SELECT name, SUM(quantity) AS s_qty FROM pizza_types INNER JOIN pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id INNER JOIN order_details ON order_details.pizza_id = pizzas.pizza_id GROUP BY name ORDER BY s_qty DESCLIMIT 5;

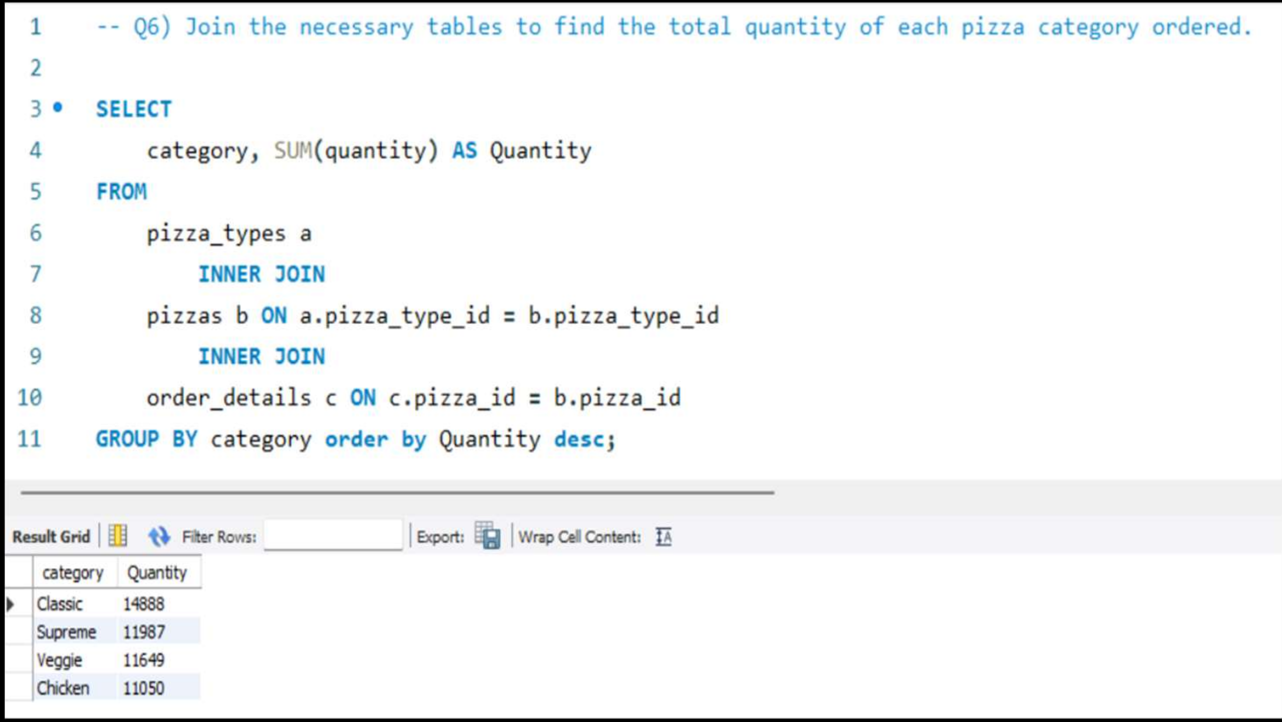


```sql
-- Q5) List the top 5 most ordered pizza types along with their quantities.
SELECT
    name, SUM(quantity) AS s_qty
FROM
    pizza_types
        INNER JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        INNER JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY name
ORDER BY s_qty DESC
LIMIT 5;
```

name	s_qty
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.

SELECT category, SUM(quantity) AS Quantity FROM pizza_types a INNER JOIN pizzas b ON a.pizza_type_id = b.pizza_type_id INNER JOIN order_details c ON c.pizza_id = b.pizza_id GROUP BY category order by Quantity desc;

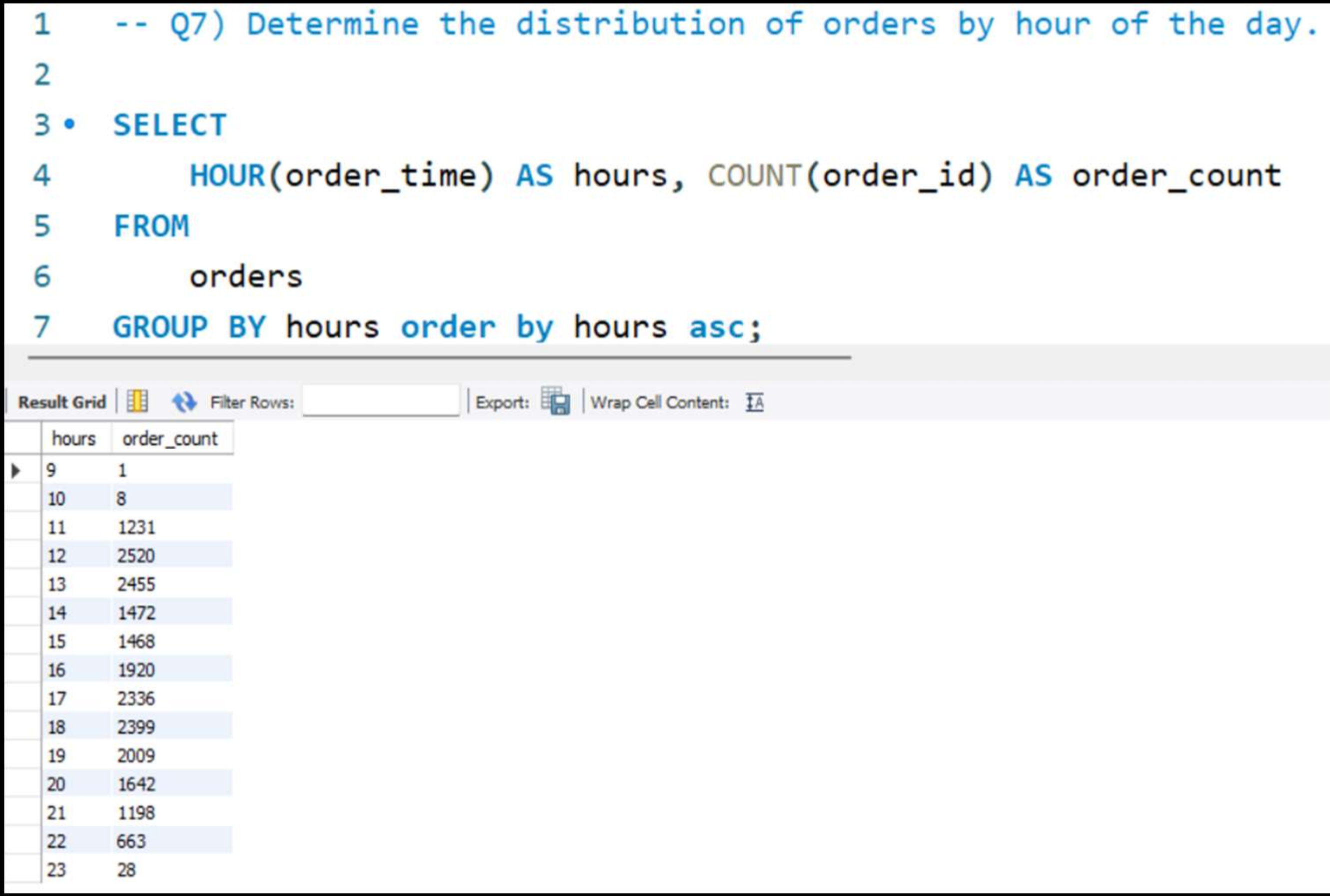


```
-- Q6) Join the necessary tables to find the total quantity of each pizza category ordered.

SELECT
    category, SUM(quantity) AS Quantity
FROM
    pizza_types a
        INNER JOIN
    pizzas b ON a.pizza_type_id = b.pizza_type_id
        INNER JOIN
    order_details c ON c.pizza_id = b.pizza_id
GROUP BY 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.

```
SELECT HOUR(order_time) AS hours,
COUNT(order_id) AS order_count
FROM    orders GROUP BY hours
order by hours asc;
```

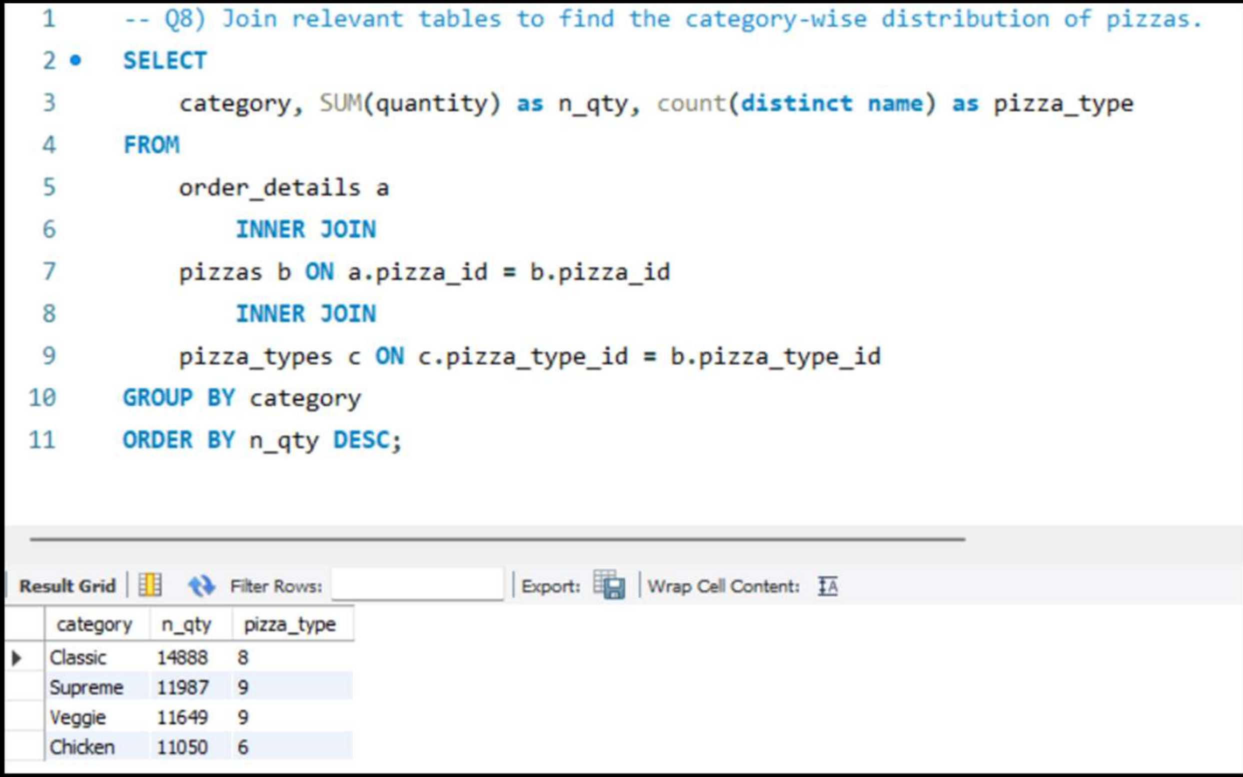


```
-- Q7) Determine the distribution of orders by hour of the day.

SELECT
    HOUR(order_time) AS hours, COUNT(order_id) AS order_count
FROM
    orders
GROUP BY hours order by hours asc;
```

hours	order_count
9	1
10	8
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

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

SELECT category, SUM(quantity) as n_qty, count(distinct name) as pizza_type FROM order_details a INNER JOIN   pizzas b ON a.pizza_id = b.pizza_id INNER JOIN   pizza_types c ON c.pizza_type_id = b.pizza_type_id GROUP BY category ORDER BY n_qty DESC;

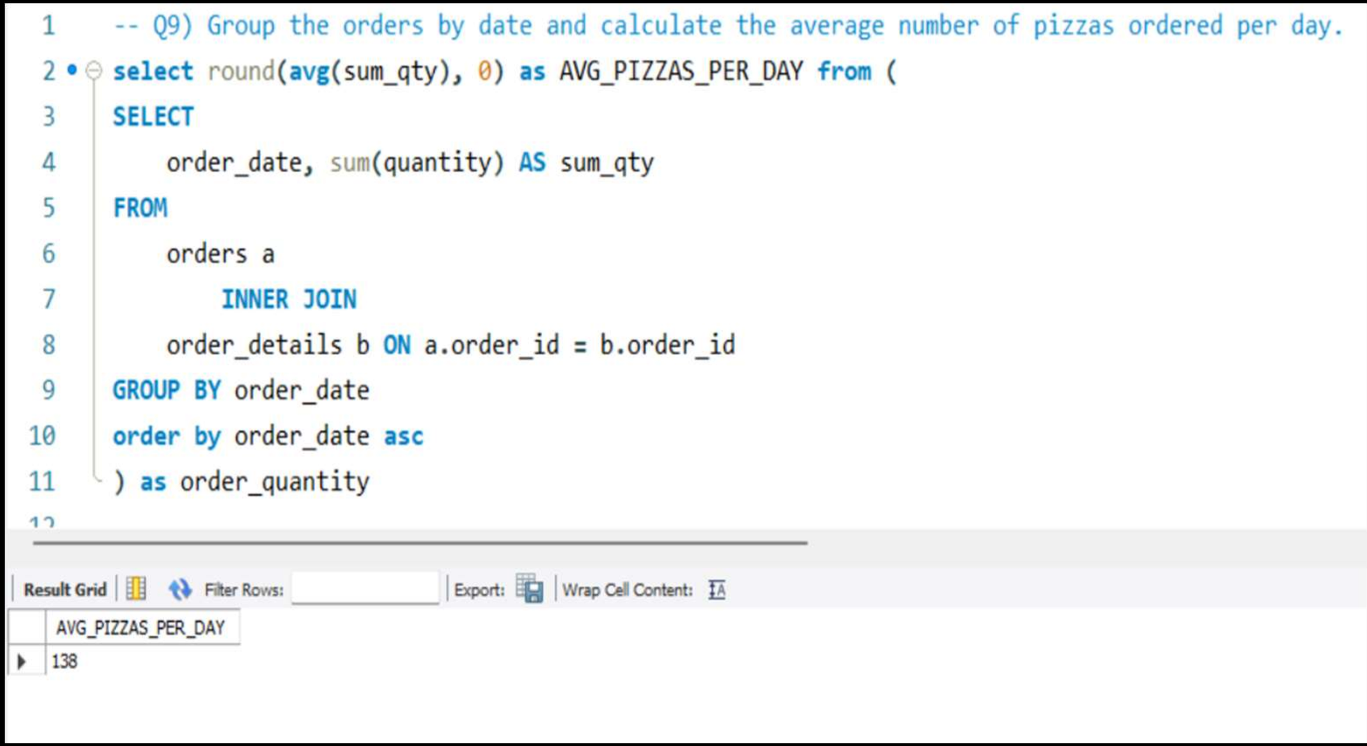


```
-- Q8) Join relevant tables to find the category-wise distribution of pizzas.
SELECT
    category, SUM(quantity) as n_qty, count(distinct name) as pizza_type
FROM
    order_details a
        INNER JOIN
    pizzas b ON a.pizza_id = b.pizza_id
        INNER JOIN
    pizza_types c ON c.pizza_type_id = b.pizza_type_id
GROUP BY category
ORDER BY n_qty DESC;
```

category	n_qty	pizza_type
Classic	14888	8
Supreme	11987	9
Veggie	11649	9
Chicken	11050	6

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

select round(avg(sum_qty), 0) as AVG_PIZZAS_PER_DAY from (SELECT order_date, sum(quantity) AS sum_qty FROM   orders a INNER JOIN order_details b ON a.order_id = b.order_id GROUP BY order_date order by order_date asc) as order_quantity

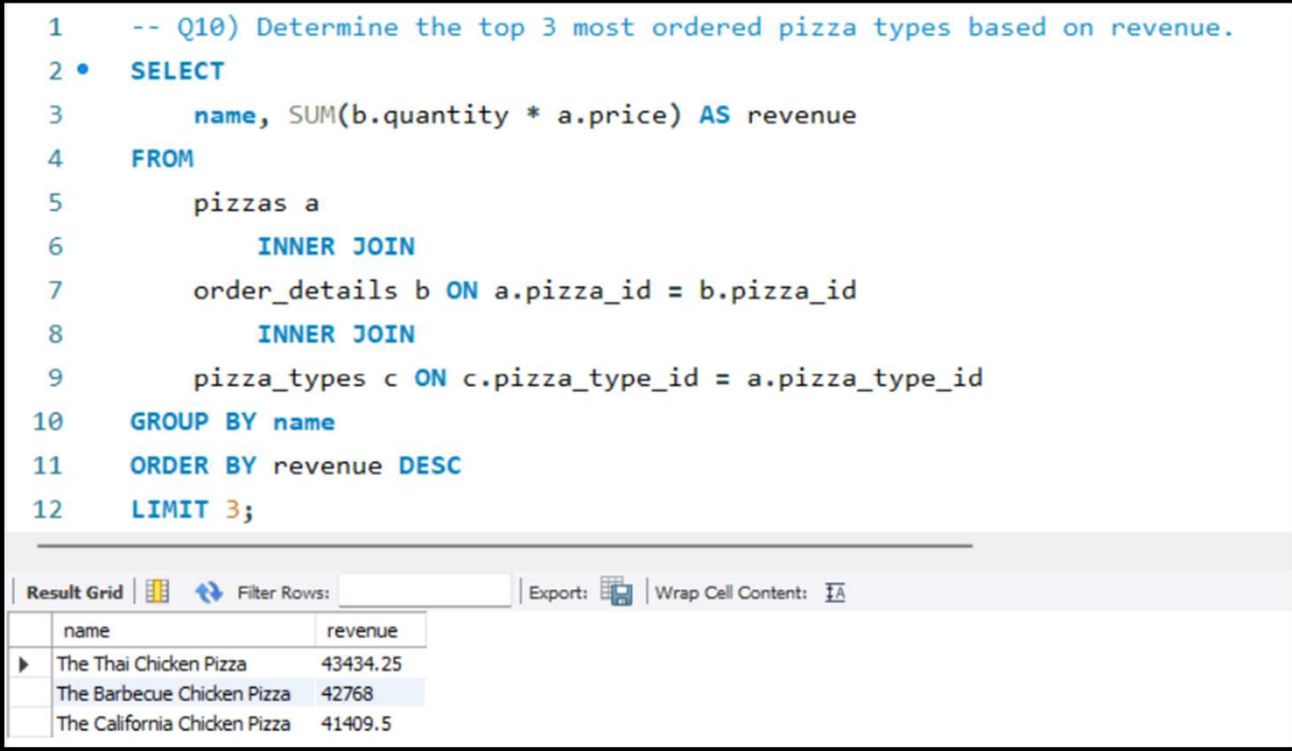


```
-- Q9) Group the orders by date and calculate the average number of pizzas ordered per day.
select round(avg(sum_qty), 0) as AVG_PIZZAS_PER_DAY from (
SELECT
    order_date, sum(quantity) AS sum_qty
FROM
    orders a
        INNER JOIN
    order_details b ON a.order_id = b.order_id
GROUP BY order_date
order by order_date asc
) as order_quantity
```

```
AVG_PIZZAS_PER_DAY
138
```

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

SELECT name, SUM(b.quantity * a.price) AS revenue FROM pizzas a INNER JOIN order_details b ON a.pizza_id = b.pizza_id INNER JOIN pizza_types c ON c.pizza_type_id = a.pizza_type_id GROUP BY name ORDER BY revenue DESCLIMIT 3;

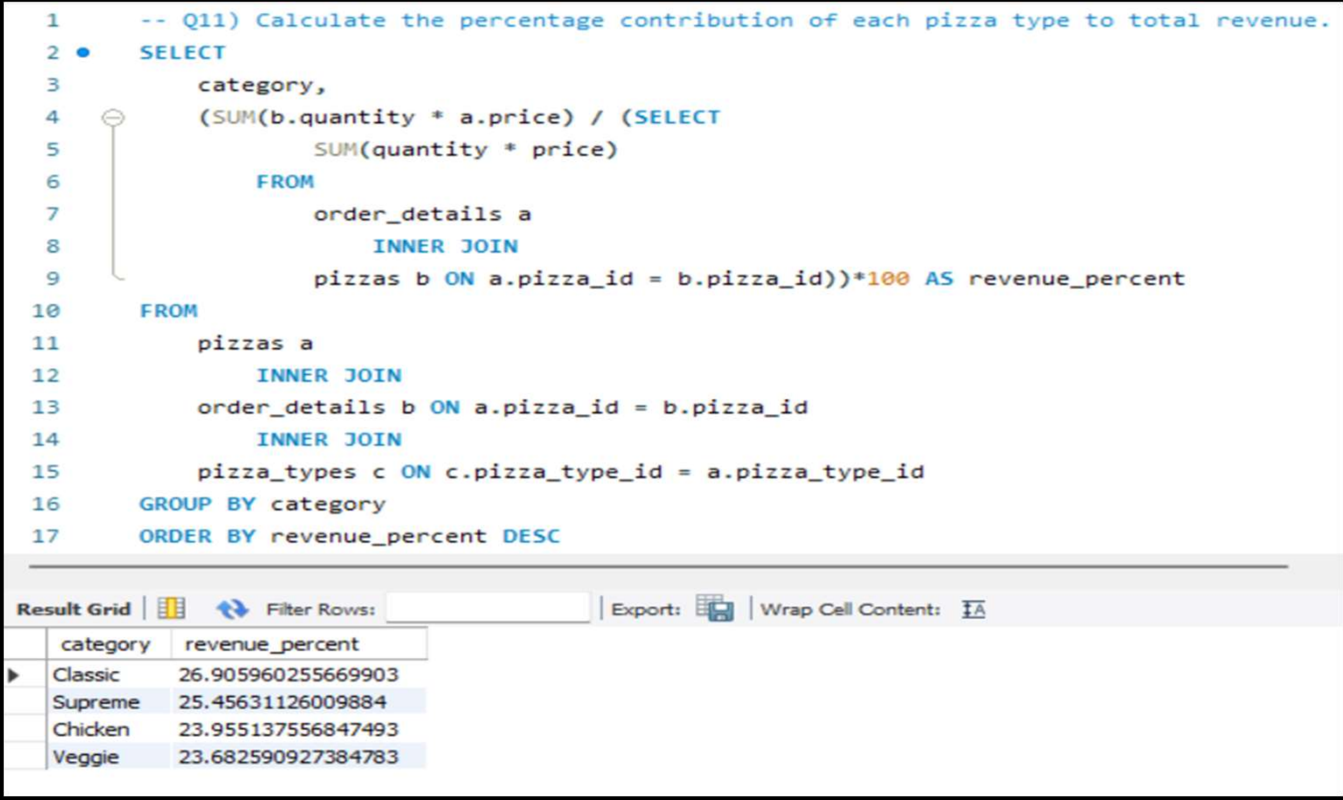


```
-- Q10) Determine the top 3 most ordered pizza types based on revenue.
SELECT
    name, SUM(b.quantity * a.price) AS revenue
FROM
    pizzas a
        INNER JOIN
    order_details b ON a.pizza_id = b.pizza_id
        INNER JOIN
    pizza_types c ON c.pizza_type_id = a.pizza_type_id
GROUP BY name
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

Q11) Calculate the percentage contribution of each pizza type to total revenue.

SELECT category, (SUM(b.quantity * a.price) / (SELECT SUM(quantity * price) FROM order_details a INNER JOIN pizzas b ON a.pizza_id = b.pizza_id))*100 AS revenue_percent FROM pizzas a INNER JOIN order_details b ON a.pizza_id = b.pizza_id INNER JOIN pizza_types c ON c.pizza_type_id = a.pizza_type_id GROUP BY category ORDER BY revenue_percent DESC

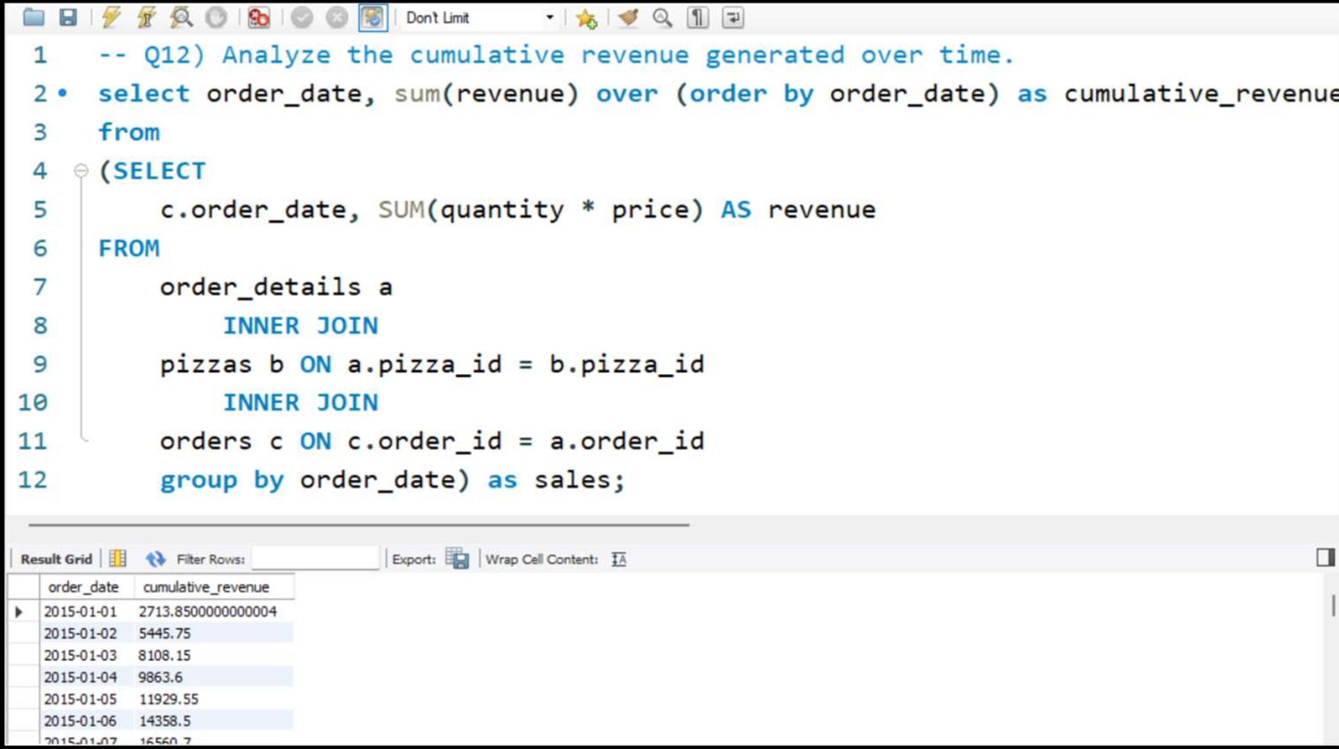


```
-- Q11) Calculate the percentage contribution of each pizza type to total revenue.
SELECT
    category,
    (SUM(b.quantity * a.price) / (SELECT
            SUM(quantity * price)
        FROM
            order_details a
                INNER JOIN
            pizzas b ON a.pizza_id = b.pizza_id))*100 AS revenue_percent
FROM
    pizzas a
        INNER JOIN
    order_details b ON a.pizza_id = b.pizza_id
        INNER JOIN
    pizza_types c ON c.pizza_type_id = a.pizza_type_id
GROUP BY category
ORDER BY revenue_percent DESC
```

category	revenue_percent
Classic	26.905960255669903
Supreme	25.45631126009884
Chicken	23.955137556847493
Veggie	23.682590927384783

Q12) Analyze the cumulative revenue generated over time.

select order_date, sum(revenue) over (order by order_date) as cumulative_revenue from (SELECT c.order_date, SUM(quantity * price) AS revenue FROM order_details a INNER JOIN pizzas b ON a.pizza_id = b.pizza_id INNER JOIN orders c ON c.order_id = a.order_id group by order_date) as sales;

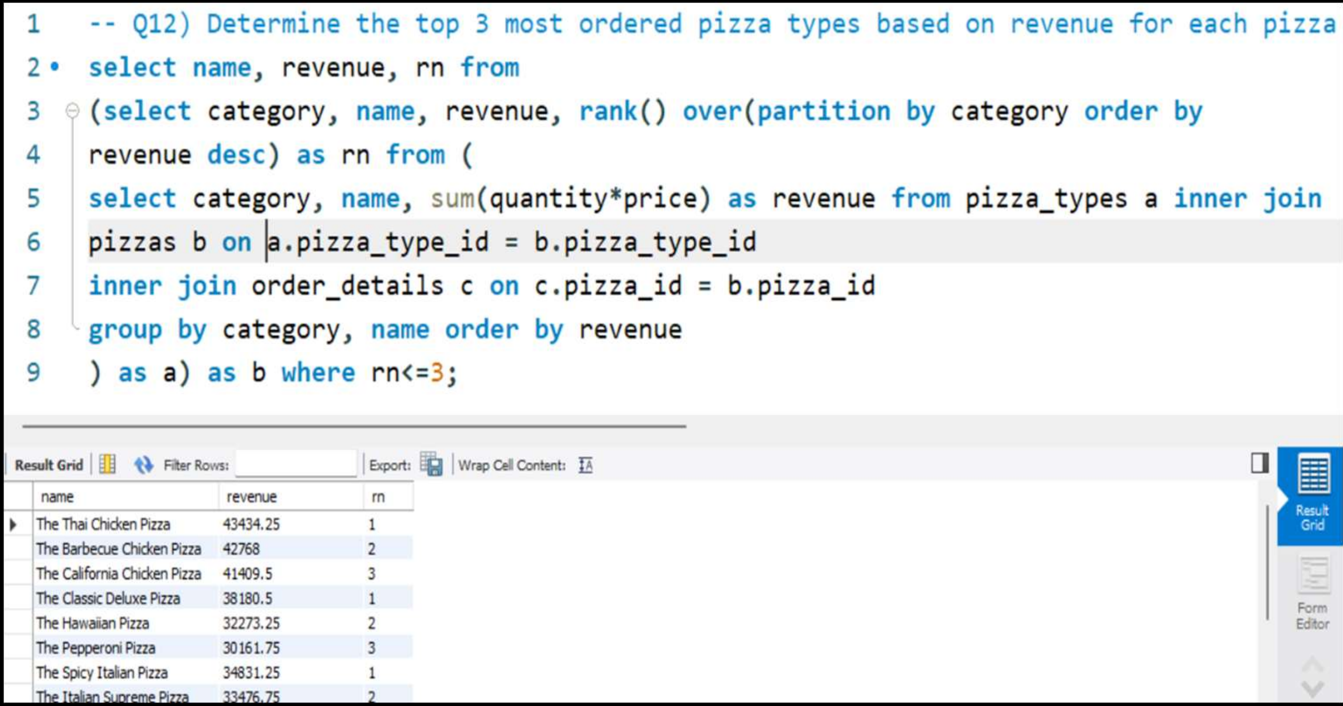


```
-- Q12) Analyze the cumulative revenue generated over time.
select order_date, sum(revenue) over (order by order_date) as cumulative_revenue
from
(SELECT
    c.order_date, SUM(quantity * price) AS revenue
FROM
    order_details a
        INNER JOIN
    pizzas b ON a.pizza_id = b.pizza_id
        INNER JOIN
    orders c ON c.order_id = a.order_id
    group by order_date) as sales;
```

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

Q13) Determine the top 3 most ordered pizza types based on revenue for each pizza category.

```
select name, revenue, rn from (select category, name, revenue, rank() over(partition by category order by revenue desc) as rn from (select category, name, sum(quantity*price) as revenue from pizza_types a inner join pizzas b on a.pizza_type_id = b.pizza_type_id inner join order_details c on c.pizza_id = b.pizza_id group by category, name order by revenue) as a) as b where rn<=3;
```



```
-- Q12) Determine the top 3 most ordered pizza types based on revenue for each pizza
select name, revenue, rn from
(select category, name, revenue, rank() over(partition by category order by
revenue desc) as rn from (
select category, name, sum(quantity*price) as revenue from pizza_types a inner join
pizzas b on a.pizza_type_id = b.pizza_type_id
inner join order_details c on c.pizza_id = b.pizza_id
group by category, name order by revenue
) as a) as b where rn<=3;
```

name	revenue	rn
The Thai Chicken Pizza	43434.25	1
The Barbecue Chicken Pizza	42768	2
The California Chicken Pizza	41409.5	3
The Classic Deluxe Pizza	38180.5	1
The Hawaiian Pizza	32273.25	2
The Pepperoni Pizza	30161.75	3
The Spicy Italian Pizza	34831.25	1
The Italian Supreme Pizza	33476.75	2

THANK YOU