DAY 22: COMMON TABLE EXPRESSION

I learned that Common Table Expressions can be referred to as "WITH clauses." They are useful for creating an alias for a query, which can then be referenced in other queries. If you need to create an alias for multiple queries within the WITH clause, you should place each query within its own set of parentheses, separated by commas.

```sql
/*write a query to calculate the number of orders made by each employee.*/
WITH employee_count AS (SELECT employee_id, COUNT(DISTINCT order_id) AS order_num
                        FROM orders
                        GROUP BY employee_id
                        ),
    employee_identity AS (SELECT employee_id, employee_name
                          FROM employees
                          )
    SELECT EI.employee_id, employee_name, EC.order_num
    FROM employee_count AS EC
    INNER JOIN employee_identity AS EI
    ON EC.employee_id = EI.employee_id
    ORDER BY EC.order_num DESC;


/*Write a query to calculate the total quantity of each product ordered.*/
WITH prod_quantity AS (SELECT order_id, product_id, SUM(quantity) AS total_quantity
                       FROM order_details
                       GROUP BY order_id, product_id
                       ),
    prod_details AS  (SELECT product_id, product_name
                      FROM products
                      )
    SELECT PD.product_id, PD.product_name, PQ.total_quantity
    FROM prod_quantity AS PQ
    JOIN prod_details AS PD
    ON PQ.product_id = PD.product_id
    ORDER BY total_quantity DESC
    LIMIT 10;
```