Day10

Assignment1: Craft a query using an INNER JOIN to combine 'orders' and 'customers' tables for customers in a specified region, and a LEFT JOIN to display all customers including those without orders.

Query 1: INNER JOIN to Combine 'orders' and 'customers' Tables for Customers in a Specified Region

Here we will combine the orders and customers tables to get information about orders placed by customers from a specific region. Let's assume the specified region is 'North'.

```
SELECT
   customers.customer_id,
   customers.first_name,
   customers.last_name,
   customers.region,
   orders.order_id,
   orders.order_date,
   orders.amount
FROM
   customers
INNER JOIN
   orders
ON
   customers.customer_id = orders.customer_id
WHERE
   customers.region = 'North';
```

Query 2: LEFT JOIN to Display All Customers Including Those Without Orders

This query will display all customers, including those who have not placed any orders.

```
SELECT

 customers.customer_id,

 customers.first_name,

   customers.last_name,
   customers.region,
   orders.order_id,
   orders.order_date,
   orders.amount
FROM
   customers
LEFT JOIN
   orders
ON
   customers.customer_id = orders.customer_id;
```

Assignment 2: Utilize a subquery to find customers who have placed orders above the average order value, and write a UNION query to combine two SELECT statements with the same number of columns.
Ans:

Query 1: Subquery to Find Customers Who Have Placed Orders Above the Average Order Value

```
SELECT
  customer_id,
  first_name,
  last_name
FROM
  customers
WHERE
  customer_id IN (
    SELECT
      DISTINCT customer_id
    FROM
      orders
    WHERE
      amount > (SELECT AVG(amount) FROM orders)
  );
```

Query 2: UNION Query to Combine Two SELECT Statements with the Same Number of Columns

```
-- First SELECT statement: customers from the 'North' region
SELECT
  customer_id,
  first_name,
  last_name
FROM
  customers
WHERE
  region = 'North'

UNION

-- Second SELECT statement: customers who have placed an order within the last 30 days
SELECT
  c.customer_id,
  c.first_name,
  c.last_name
FROM
  customers c
JOIN
  orders o ON c.customer_id = o.customer_id
WHERE
  o.order_date >= CURDATE() - INTERVAL 30 DAY;
```