**Assignment 6 : 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.**

**1. Subquery for Customers Above Average Order Value:**

Here's the query using a subquery to identify customers with orders exceeding the average order value:

SQL

SELECT c.customer\_id, c.customer\_name

FROM customers c

WHERE c.order\_total > (

SELECT AVG(o.order\_total)

FROM orders o

);

**Explanation:**

1. **SELECT Clause:**
   * c.customer\_id, c.customer\_name: Selects customer ID and name from the customers table.
2. **FROM Clause:**
   * customers c: Specifies the main table (customers) and assigns it an alias c.
3. **WHERE Clause:**
   * The WHERE clause uses a subquery to filter customers:
     + c.order\_total > ( ... ): This checks if the order\_total for each customer (c) is greater than the average order total obtained from the subquery within parentheses.
4. **Subquery:**
   * SELECT AVG(o.order\_total) FROM orders o: This subquery calculates the average order total from the orders table.

This query identifies customers whose total order value is higher than the average order value placed by all customers.

**2. UNION Query Combining Results:**

Here's a UNION query to combine the results from the previous query (customers above average order) with another SELECT statement (e.g., all customers):

SQL

(

SELECT c.customer\_id, c.customer\_name

FROM customers c

WHERE c.order\_total > (

SELECT AVG(o.order\_total)

FROM orders o

)

)

UNION

(

-- Replace this with your desired SELECT statement (e.g., all customers)

SELECT c.customer\_id, c.customer\_name

FROM customers c

)

**Explanation:**

1. **First Subquery:** This is the same subquery from the previous section, identifying customers above average order value.
2. **UNION:** This keyword combines the results from the first subquery with the results from the second subquery.
3. **Second Subquery (Replaceable):**
   * You can replace this section with any other SELECT statement that retrieves data from the customers table and has the same number of columns (customer ID and customer name) as the first subquery. For example, you could use:
     + SELECT c.customer\_id, c.customer\_name FROM customers c - This retrieves all customers.

**Note:**

* UNION removes duplicate rows from the combined results.
* Ensure both subqueries have the same number and order of columns for a successful UNION operation.