***Assignment 3:*** *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.*

***Query 1: Subquery - Customers with Orders Above Average Order Value***

*SELECT c.customer\_name, o.order\_id, o.order\_total*

*FROM customers c*

*JOIN orders o*

*ON c.customer\_id = o.customer\_id*

*WHERE o.order\_total > (*

*SELECT AVG(order\_total)*

*FROM orders*

*)*

*ORDER BY o.order\_total DESC;*

***Query 2: UNION Query - Combine Two SELECT Statements***

*SELECT customer\_name, order\_id, order\_date*

*FROM orders*

*WHERE order\_date < '2022-01-01'*

*UNION ALL*

*SELECT customer\_name, order\_id, order\_date*

*FROM orders*

*WHERE order\_total > (*

*SELECT AVG(order\_total)*

*FROM orders*

*);*

***Explanation****:*

***Subquery****:*

*Calculates average order value.*

*Selects customers with orders exceeding this average.*

*Orders results by order total in descending order.*

***UNION Query:***

*Combines two SELECT statements with identical column counts.*

*First query selects orders before '2022-01-01'.*

*Second query selects orders exceeding average order value.*

*UNION ALL includes duplicate rows.*

***Example Use Case:***

*Suppose we have the following tables:*

***Customers Table:***

***customer\_id customer\_name***

*1 Naveen*

*2 Ajay*

*3 Surya*

***Orders Table:***

***order\_id customer\_id order\_date order\_total***

*101 1 2022-01-01 500*

*102 2 2022-01-15 1200*

*103 3 2022-02-01 800*

*104 1 2021-12-31 300*

***Subquery Result (Average Order Value = 700):***

***customer\_name order\_id order\_total***

*Ajay 102 1200*

*Surya 103 800*

***UNION Query Result:***

***customer\_name order\_id order\_date***

*Naveen 104 2021-12-31*

*Ajay 102 2022-01-15*

*Surya 103 2022-02-01*