

## **SQL ASSIGNMENT 3:- DATA WRANGLING OLYMPICS**

### Task:

1. Consider two or more related datasets from your chosen software (e.g., customer data and order data).
2. Practice data integration:
  - Merge: Combine datasets based on a common key (e.g., customer ID) using MERGE or similar functionality.
3. Enhance data organization:
  - Sort: Apply ORDER BY clauses to sort data based on specific columns (e.g., sorting orders by date).
  - Filtering: Utilize the WHERE clause with various operators to filter and focus on specific subsets of data (e.g., finding orders placed in a particular month).

### Solution:

- Show datasets (Customer & Order)

SELECT \* FROM CustomerData

	CustomerID	FirstName	LastName	Email	City	State
1	1	John	Smith	john.smith@email.com	New York	NY
2	2	Jane	Doe	jane.doe@email.com	Los Angeles	CA
3	3	Michael	Johnson	michael.johnson@email.com	Chicago	IL
4	4	Emily	Davis	emily.davis@email.com	Houston	TX
5	5	William	Brown	william.brown@email.com	Miami	FL

SELECT \* FROM OrderData

	OrderID	CustomerID	OrderDate	OrderAmount
1	101	1	2023-06-15	250.75
2	102	2	2023-06-16	300.50
3	103	1	2023-06-17	450.00
4	104	3	2023-06-18	150.20
5	105	4	2023-06-19	100.00

- Practice data integration (Merge)

SELECT \* FROM CustomerData c INNER JOIN OrderData o  
ON c.CustomerID = o.CustomerID

	CustomerID	FirstName	LastName	Email	City	State	OrderID	CustomerID	OrderDate	OrderAmount
1	1	John	Smith	john.smith@email.com	New York	NY	101	1	2023-06-15	250.75
2	2	Jane	Doe	jane.doe@email.com	Los Angeles	CA	102	2	2023-06-16	300.50
3	1	John	Smith	john.smith@email.com	New York	NY	103	1	2023-06-17	450.00
4	3	Michael	Johnson	michael.johnson@email.com	Chicago	IL	104	3	2023-06-18	150.20
5	4	Emily	Davis	emily.davis@email.com	Houston	TX	105	4	2023-06-19	100.00

- Enhance data organization(Sort, Filtering)

```
SELECT o.OrderID, c.FirstName, o.OrderDate FROM OrderData o INNER JOIN  
CustomerData c ON o.CustomerID = c.CustomerID ORDER BY o.OrderDate
```

	OrderID	FirstName	OrderDate
1	101	John	2023-06-15
2	102	Jane	2023-06-16
3	103	John	2023-06-17
4	104	Michael	2023-06-18
5	105	Emily	2023-06-19

```
SELECT o.OrderID, c.FirstName, o.OrderAmount FROM OrderData o INNER JOIN  
CustomerData c ON o.CustomerID = c.CustomerID WHERE o.OrderAmount>300
```

	OrderID	FirstName	OrderAmount
1	102	Jane	300.50
2	103	John	450.00