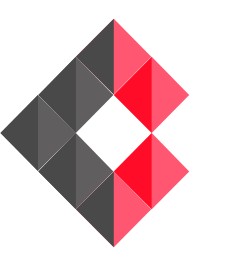
**Internship Task** - **RDBMS and SQL Task #5**

SQL case-based assignment with a scenario and 10 queries for a food booking application like **Zomato**.

**Scenario :**You are managing a database for a food delivery application like Zomato. The database includes the following tables:

1. **Restaurants** o RestaurantID (Primary Key) o Name o City
   * CuisineType (e.g., 'Indian', 'Chinese', 'Italian') o Rating (out of 5) o AverageCostForTwo
2. **Customers** o CustomerID (Primary Key)
   * FirstName o LastName o Phone o City o JoinDate
3. **Orders** o OrderID (Primary Key) o CustomerID (Foreign Key) o RestaurantID (Foreign Key)
   * OrderDate
   * OrderAmount



* + OrderStatus (e.g., 'Delivered', 'Cancelled', 'Pending')

1. **Reviews** o ReviewID (Primary Key) o CustomerID (Foreign Key) o RestaurantID (Foreign Key) o Rating (out of 5) o Comment o ReviewDate
2. **Payments** o PaymentID (Primary Key)
   * OrderID (Foreign Key)
   * PaymentMethod (e.g., 'Card', 'Cash', 'Wallet')
   * Amount o PaymentDate

# Assignment Queries

1. **Retrieve the names and locations of restaurants with a rating of 4.5 or higher.**

**Ans :**

SELECT Restaurant.Name, Restaurant.City

FROM Restaurants Restaurant

WHERE Restaurant.Rating >= 4.5;

1. **Find the total number of orders placed by each customer.**

**Ans :**

SELECT Customer.FirstName, Customer.LastName, COUNT(OrderTable.OrderID) AS TotalOrders

FROM Customers Customer

LEFT JOIN Orders OrderTable ON Customer.CustomerID = OrderTable.CustomerID

GROUP BY Customer.CustomerID, Customer.FirstName, Customer.LastName;

1. **List all restaurants offering "Italian" cuisine in "Mumbai".**

**Ans :**

SELECT Customer.FirstName, Customer.LastName, COUNT(OrderTable.OrderID) AS TotalOrders

FROM Customers Customer

LEFT JOIN Orders OrderTable ON Customer.CustomerID = OrderTable.CustomerID

GROUP BY Customer.CustomerID, Customer.FirstName, Customer.LastName;

1. **Calculate the total revenue generated by each restaurant from completed orders.**

**Ans :**

SELECT Restaurant.Name, SUM(OrderTable.OrderAmount) AS TotalRevenue

FROM Restaurants Restaurant

JOIN Orders OrderTable ON Restaurant.RestaurantID = OrderTable.RestaurantID

WHERE OrderTable.OrderStatus = 'Delivered'

GROUP BY Restaurant.RestaurantID, Restaurant.Name;

1. **Retrieve the most recent order placed by each customer.**

**Ans :**

SELECT Customer.FirstName, Customer.LastName, MAX(OrderTable.OrderDate) AS MostRecentOrderDate

FROM Customers Customer

LEFT JOIN Orders OrderTable ON Customer.CustomerID = OrderTable.CustomerID

GROUP BY Customer.CustomerID, Customer.FirstName, Customer.LastName;

1. **List customers who have not placed any orders yet.**

**Ans :**

SELECT Customer.FirstName, Customer.LastName

FROM Customers Customer

WHERE Customer.CustomerID NOT IN (SELECT DISTINCT OrderTable.CustomerID FROM Orders OrderTable);

1. **Identify the most reviewed restaurants.**

**Ans :**

SELECT Restaurant.Name, COUNT(Review.ReviewID) AS NumberOfReviews

FROM Restaurants Restaurant

LEFT JOIN Reviews Review ON Restaurant.RestaurantID = Review.RestaurantID

GROUP BY Restaurant.RestaurantID, Restaurant.Name

ORDER BY NumberOfReviews DESC;

1. **Find the most preferred payment method.**

**Ans :**

SELECT Payment.PaymentMethod, COUNT(Payment.PaymentID) AS PaymentCount

FROM Payments Payment

GROUP BY Payment.PaymentMethod

ORDER BY PaymentCount DESC

LIMIT 1;

1. **List the top 5 restaurants by total revenue.**

**Ans :**

SELECT Restaurant.Name, SUM(OrderTable.OrderAmount) AS TotalRevenue

FROM Restaurants Restaurant

JOIN Orders OrderTable ON Restaurant.RestaurantID = OrderTable.RestaurantID

WHERE OrderTable.OrderStatus = 'Delivered'

GROUP BY Restaurant.RestaurantID, Restaurant.Name

ORDER BY TotalRevenue DESC

LIMIT 5;

1. **Show the details of all cancelled orders along with the customer's and restaurant's names.**

**Ans :**

SELECT OrderTable.OrderID, OrderTable.OrderDate, Customer.FirstName AS CustomerFirstName, Customer.LastName AS CustomerLastName, Restaurant.Name AS RestaurantName

FROM Orders OrderTable

JOIN Customers Customer ON OrderTable.CustomerID = Customer.CustomerID

JOIN Restaurants Restaurant ON OrderTable.RestaurantID = Restaurant.RestaurantID

WHERE OrderTable.OrderStatus = 'Cancelled';