Project Deliverable 5a

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Report 1 – To find total sales amount by restaurant and customer

Code-

```
SELECT

        UPPER(c.First_Name) as Customer_First_Name,

        UPPER(c.Last_Name) as Customer_Last_Name,

        r.Name as Restaurant_Name,

        ROUND(SUM(o.Total_amount), 2) AS Total_Sales

FROM Orders o

JOIN Customer c on o.Customer_ID = c.Customer_ID

JOIN Restaurant r on o.Restaurant_ID = r.Restaurant_ID

GROUP BY c.First_Name , c.Last_Name , r.Name

ORDER BY Total_amount DESC;
```

Output-

	A-Z Customer_First_Name	A-Z Customer_Last_Name	A-Z Restaurant_Name	123 Total_Sales
1	LAURA	HARRIS	Sage	120
2	ZANE	ADAMS	Flamboynte	111
3	JENNY	JACKSON	Sea View	100
4	VINCE	ALLEN	The Garden Plate	95
5	KYLE	WHITE	Asilo	90
6	TINA	HALL	Urban Eatery	80
7	LUCAS	REED	The Dome	75
8	RACHEL	CLARK	City Lights	71
9	DIANA	MILLER	The Lady	65
10	WENDY	KING	Lakeside Lounge	60
11	BOB	BROWN	Sunberry	58

This report will help the owner to identify the total sales amount by customers at every restaurant.

Using this report restaurants can run targeted promotions for customers with highest sales and marketing strategies to attract customers.

Report 2 – To find average order amount by restaurant and customer, and categorize customers as high spender or regular spender.

```
SELECT
    R.Name AS RestaurantName,
    C.First_Name AS CustomerFirstName,
    C.Last_Name AS CustomerFullName,
    COUNT(O.Order_ID) AS TotalOrders,
    ROUND(AVG(O.Total_amount), 2) AS AverageOrderAmount,
    CASE
        WHEN AVG(O.Total_amount) > 50 THEN 'High Average Spender'
        ELSE 'Regular Average Spender'
    END AS SpendingCategory
FROM Restaurant R
JOIN Orders O ON R.Restaurant_ID = O.Restaurant_ID
JOIN Customer C ON O.Customer_ID = C.Customer_ID
GROUP BY R.Name, C.First_Name, C.Last_Name
ORDER BY AverageOrderAmount DESC;
```

	A-Z RestaurantName	A-Z CustomerFirstName	A-Z CustomerFullName	123 TotalOrders	123 AverageOrderAmount	A-Z SpendingCategory
1	Sage	Laura	Harris	1	120	High Average Spender
2	Flamboynte	Zane	Adams	1	111	High Average Spender
3	Sea View	Jenny	Jackson	1	100	High Average Spender
4	The Garden Plate	Vince	Allen	1	95	High Average Spender
5	Asilo	Kyle	White	1	90	High Average Spender
6	Urban Eatery	Tina	Hall	1	80	High Average Spender
7	The Dome	Lucas	Reed	1	75	High Average Spender
8	City Lights	Rachel	Clark	1	71	High Average Spender
9	The Lady	Diana	Miller	1	65	High Average Spender
10	Lakeside Lounge	Wendy	King	1	60	High Average Spender
11	Sunberry	Bob	Brown	1	58	High Average Spender
12	Issy	Oscar	Martinez	1	56	High Average Spender
13	Playa Bowl	Hannah	Anderson	1	51	High Average Spender
14	Pearl	Nina	Garcia	1	47	Regular Average Spender
15	Vista Point	Xander	Scott	1	45	Regular Average Spender
16	Dhabawala	Jane	Smith	1	45	Regular Average Spender

Categorizing customers as a High Spender or Regular Spender and finding total number of orders and average order amount by customer name can help restaurants to know the loyal and frequently visiting customers.

Report 3 – To find top 5 frequent customers per restaurant

```
WITH Ranked_Customers AS (
  SELECT
    r.Name AS Restaurant_Name,
    CONCAT(UPPER(c.First_Name), ' ', UPPER(c.Last_Name)) AS Customer_Name,
    COUNT(o.Order_ID) AS Order_Count,
    RANK() OVER (PARTITION BY r.Restaurant_ID ORDER BY COUNT(o.Order_ID) DESC) AS Customer_Rank
  FROM Orders o
  JOIN Customer c ON o.Customer_ID = c.Customer_ID
  JOIN Restaurant r ON o.Restaurant_ID = r.Restaurant_ID
  GROUP BY r.Name, c.First_Name, c.Last_Name, r.Restaurant_ID
```

)

SELECT

   Restaurant_Name,

   Customer_Name,

   Order_Count,

   Customer_Rank

FROM *Ranked_Customers*

WHERE *Customer_Rank <= 5*

ORDER BY *Restaurant_Name;*

<mark>Output-</mark>

	A-Z Restaurant_Name	A-Z Customer_Name	123 Order_Count	123 Customer_Rank
1	Asilo	KYLE WHITE	1	1
2	Bastian	FIONA MOORE	1	1
3	Bayview	OLIVIA PARKER	1	1
4	Central Diner	PAULA ROBINSON	1	1
5	City Lights	RACHEL CLARK	1	1
6	Cranberry	MARK MARTIN	1	1
7	Dhabawala	JANE SMITH	1	1
8	Feng	ALICE JOHNSON	1	1
9	Flamboynte	ZANE ADAMS	1	1
10	Godavari	EVAN WILSON	1	1
11	Green Pastures	SAM WALKER	1	1

<mark>Business Value-</mark>

This report highlights the top 5 most frequent customers at each restaurant, which provides us with valuable insights that can be used for targeted marketing and customer retention strategies. This also enables the business optimized resources to improve customer experience, which can help the retention strategy.