WEEK-2

PRACTICE PROBLEMS

Sales (Date, **Order_id**, **Item_id**, **Customer_id**, Quantity, Revenue)

Items (**Item_id**, Item_name, Price, Department)

Customers (**Customer_id**, First_name, Last_name, Address)

1. Pull total number of orders that were completed on 18th March 2023.
   SELECT COUNT(DISTINCT(s.Order_id))
   FROM Sales AS s
   WHERE s.Date='2023-03-18';

2. Pull total number of orders that were completed on 18th March 2023 with the first name 'John' and last name 'Doe'.
   SELECT COUNT(DISTINCT(s.Order_id))
   FROM Sales AS s
   INNER JOIN Customers AS c ON s.Customer_id=c.Customer_id
   WHERE s.Date='18th March 2023' AND c.First_name='John' AND c.Last_name='Doe';

3. Pull total number of customers that purchased in January 2023 and the average amount spend per customer.
   SELECT COUNT(DISTINCT(s.Customer_id)), AVG(s.Revenue)
   FROM Sales AS s
   WHERE s.Date BETWEEN ('1st January 2023', '31st January 2023')
   GROUP BY c.Customer_id;

4. Pull the departments that generated less than $600 in 2022.
   SELECT i.Department, SUM(s.Revenue) AS total_revenue
   FROM Sales s
   JOIN Items i ON s.Item_id = i.Item_id
   WHERE s.Date BETWEEN '2022-01-01' AND '2022-12-31'
   GROUP BY i.Department
   HAVING total_revenue < 600;

5. What is the most and least revenue we have generated by an order.
   SELECT MAX(Revenue), MIN(Revenue)
   FROM Sales;

6. What were the orders that were purchased in our most lucrative order.
   SELECT Order_id, Item_id, Quantity, Revenue
   FROM Sales
   WHERE Revenue = (SELECT MAX(Revenue) FROM Sales);