SALES PROJECT QUESTIONS AND QUERIES:

1.List all customers with their billing and shipping addresses?

SELECT c.CustomerID, CONCAT(c.FirstName, ' ', c.LastName) AS CustomerName,

   b.Street AS BillingStreet, s.Street AS ShippingStreet

FROM Customers c

LEFT JOIN CustomerAddresses b

   ON c.CustomerID = b.CustomerID AND b.AddressType = 'Billing'

LEFT JOIN CustomerAddresses s

   ON c.CustomerID = s.CustomerID AND s.AddressType = 'Shipping';

2. Find all orders along with customer name and total amount paid?

SELECT o.OrderID, CONCAT(c.FirstName, ' ', c.LastName) AS CustomerName,

   p.Amount AS TotalPaid, p.PaymentStatus

FROM Orders o

JOIN Customers c ON o.CustomerID = c.CustomerID

JOIN Payments p ON o.OrderID = p.OrderID;

3. Get the list of products that are out of stock?

SELECT ProductName, Stock

FROM Products

WHERE Stock = 0;

4. Top 5 most ordered products by quantity?

SELECT pr.ProductName, SUM(od.Quantity) AS TotalQuantityOrdered

FROM OrderDetails od

JOIN Products pr ON od.ProductID = pr.ProductID

GROUP BY pr.ProductName

ORDER BY TotalQuantityOrdered DESC

LIMIT 5;

5. Number of orders per payment method?

SELECT PaymentMethod, COUNT(*) AS TotalOrders

FROM Payments

GROUP BY PaymentMethod;

6. Find customers who have never placed an order?

SELECT c.CustomerID, CONCAT(c.FirstName, ' ', c.LastName) AS CustomerName

FROM Customers c

LEFT JOIN Orders o ON c.CustomerID = o.CustomerID

WHERE o.OrderID IS NULL;

7. List total revenue generated by each product category?

SELECT pc.CategoryName, SUM(p.Amount) AS TotalRevenue

FROM OrderDetails od

JOIN Products pr ON od.ProductID = pr.ProductID

JOIN ProductCategories pc ON pr.CategoryID = pc.CategoryID

JOIN Orders o ON od.OrderID = o.OrderID

JOIN Payments p ON o.OrderID = p.OrderID

WHERE p.PaymentStatus = 'Completed'

GROUP BY pc.CategoryName

ORDER BY TotalRevenue DESC;

8. Monthly sales report (order count and total payment)?

SELECT DATE_FORMAT(o.OrderDate, '%Y-%m') AS Month,

COUNT(DISTINCT o.OrderID) AS TotalOrders, SUM(p.Amount) AS TotalRevenue

FROM Orders o

JOIN Payments p ON o.OrderID = p.OrderID

WHERE p.PaymentStatus = 'Completed'

GROUP BY Month

ORDER BY Month;

9. Which customer has spent the most?

SELECT c.CustomerID, CONCAT(c.FirstName, ' ', c.LastName) AS CustomerName,

   SUM(p.Amount) AS TotalSpent

FROM Customers c

JOIN Orders o ON c.CustomerID = o.CustomerID

JOIN Payments p ON o.OrderID = p.OrderID

WHERE p.PaymentStatus = 'Completed'

GROUP BY c.CustomerID

ORDER BY TotalSpent DESC

LIMIT 1;

10. List orders that have not been paid (Pending or Failed)?

SELECT o.OrderID, CONCAT(c.FirstName, ' ', c.LastName) AS CustomerName,

   p.PaymentStatus

FROM Orders o

JOIN Customers c ON o.CustomerID = c.CustomerID

JOIN Payments p ON o.OrderID = p.OrderID

WHERE p.PaymentStatus IN ('Pending', 'Failed');

11. Shipping status for each order, with delivery address and estimated delivery date?

SELECT o.OrderID, CONCAT(c.FirstName, ' ', c.LastName) AS CustomerName,

   s.DeliveryStatus, s.EstimatedDelivery, ca.Street AS DeliveryAddress

FROM Orders o

JOIN Customers c ON o.CustomerID = c.CustomerID

JOIN Shipping s ON o.OrderID = s.OrderID

JOIN CustomerAddresses ca ON o.CustomerID = ca.CustomerID AND ca.AddressType = 'Shipping';

12. List available products by city (i.e., where they can be shipped to)?

SELECT pr.ProductName, ca.City

FROM Products pr

JOIN OrderDetails od ON pr.ProductID = od.ProductID

JOIN Orders o ON od.OrderID = o.OrderID

JOIN Customers c ON o.CustomerID = c.CustomerID

JOIN CustomerAddresses ca ON c.CustomerID = ca.CustomerID AND ca.AddressType = 'Shipping'

GROUP BY pr.ProductName, ca.City;

13. Customer Lifetime Value (CLV): Total amount spent by each customer?

SELECT c.CustomerID, CONCAT(c.FirstName, ' ', c.LastName) AS CustomerName,

   SUM(p.Amount) AS LifetimeValue

FROM Customers c

JOIN Orders o ON c.CustomerID = o.CustomerID

JOIN Payments p ON o.OrderID = p.OrderID

WHERE p.PaymentStatus = 'Completed'

GROUP BY c.CustomerID

ORDER BY LifetimeValue DESC;

14. Find cities with the highest number of orders?

SELECT ca.City, COUNT(o.OrderID) AS OrderCount

FROM Orders o

JOIN Customers c ON o.CustomerID = c.CustomerID

JOIN CustomerAddresses ca ON c.CustomerID = ca.CustomerID AND ca.AddressType = 'Shipping'

GROUP BY ca.City

ORDER BY OrderCount DESC

LIMIT 5;