**WORKSHEET-3**

**SQL**

**Refer the following ERD and answer all the questions in this worksheet. You have to write the queries using mysql for the required Operation.**

 **Customers**: stores customer’s data.

 **Products**: stores a list of scale model cars.

 **ProductLines**: stores a list of product line categories.

 **Orders**: stores sales orders placed by customers.

 **OrderDetails**: stores sales order line items for each sales order.

 **Payments**: stores payments made by customers based on their accounts.

 **Employees**: stores all employee information as well as the organization structure such as who reports to whom.

 **Offices**: stores sales office data.



1. Write SQL query to create table **Customers.**

**Answer:**

CREATE TABLE customers (

    customerNumber INT PRIMARY KEY ,

    customerName VARCHAR(20),

    contactLastName VARCHAR(20),

    contactFirstName VARCHAR(20),

    phone INT,

    addressLine1 VARCHAR(50),

    addressLine2 VARCHAR(40),

    city VARCHAR(20),

    state VARCHAR(20),

    postalCode INT,

    country VARCHAR(20),

    salesRepEmployeeNumber INT,

    creditLimit INT

);

2. Write SQL query to create table **Orders.**

CREATE TABLE orders (

    orderNumber INT PRIMARY KEY ,

    orderDate DATE,

    requiredDate DATE,

    shippedDate DATE,

    status VARCHAR(20),

    comments VARCHAR(50),

    customerNumber INT

);

3. Write SQL query to show all the columns data from the **Orders** Table.

SELECT \* FROM orders;

4. Write SQL query to show all the comments from the **Orders** Table.

SELECT comments FROM orders;

5. Write a SQL query to show orderDate and Total number of orders placed on that date, from **Orders** table.

SELECT SUM(orderNumber), orderDate

FROM orders

GROUP BY orderDate

6. Write a SQL query to show employeNumber, lastName, firstName of all the employees from **employees** table.

SELECT employeNumber, lastName, firstName FROM employees

7. Write a SQL query to show all orderNumber, customerName of the person who placed the respective order.

SELECT orderNumber, customerName FROM orders;

8. Write a SQL query to show name of all the customers in one column and salerepemployee name in another column.

SELECT customers.customerName employees.firstName

FROM employees

JOIN customers

ON customers.salesRepEmployeeNumber = employees.employeeNumber

9. Write a SQL query to show Date in one column and total payment amount of the payments made on that date from the **payments** table.

SELECT SUM(amount), paymentDate

FROM payments

GROUP BY paymentDate

10. Write a SQL query to show all the products productName, MSRP, productDescription from the **products** table.

SELECT productName, MSRP, productDescription FROM products

11. Write a SQL query to print the productName, productDescription of the most ordered product.

SELECT productName, productDescription

FROM products

WHERE productCode = (

    SELECT  productCode

    FROM orderdetails

    GROUP BY  productCode

    ORDER BY SUM(quantityOrdered) DESC

    LIMIT 1

)

12. Write a SQL query to print the city name where maximum number of orders were placed.

SELECT productName, productDescription

FROM products

WHERE (countsOrderNumber,  IN (

    SELECT COUNT(orderNumber), customerNumber

    FROM orders

    GROUP BY customerNumber

    ORDER BY COUNT(orderNumber) DESC

)

13. Write a SQL query to get the name of the state having maximum number of customers.

    SELECT state

    FROM customers

    GROUP BY state

    ORDER BY COUNT(customerNumber) DESC

LIMIT 1

14. Write a SQL query to print the employee number in one column and Full name of the employee in the second column for all the employees.

SELECT employeeNumber, concat(firstName, ' ', lastName)

FROM employees

15. Write a SQL query to print the orderNumber, customer Name and total amount paid by the customer for that order (quantityOrdered × priceEach).