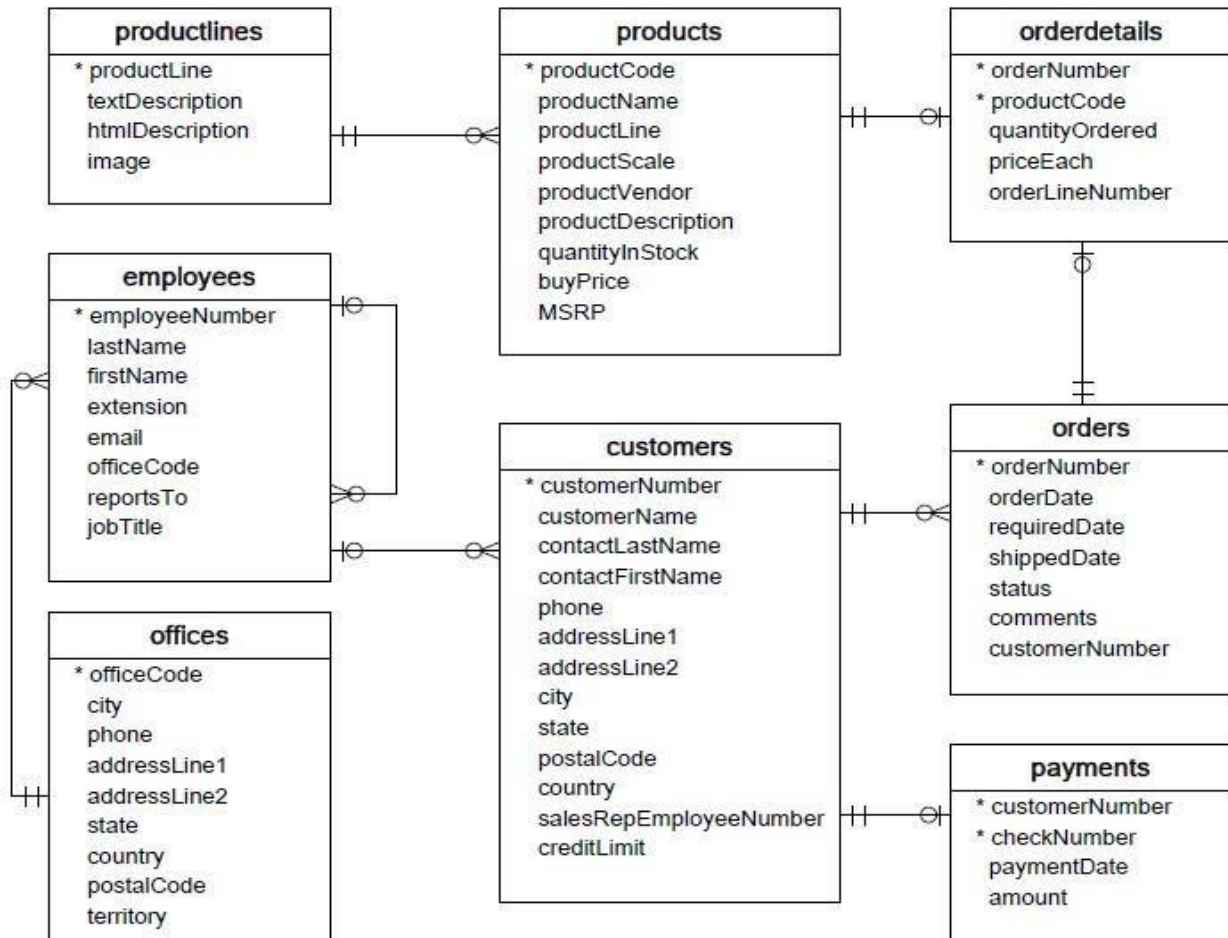# WORKSHEET 3 SQL

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.**

Ans.) CREATE TABLE Customers (
customerNumber,
customerName,
contactLastName ,
contactFirstName ,
phone,

addressLine1,
addressLine2,
city,
state,
postalcode,
country,
salesRepEmployeeNumber,
creditLimit
);

2. Write SQL query to create table **Orders.**
 Ans.) CREATE TABLE Order (
orderNumber,
orderDate,
requiredDate,
shippedDate,
status,
comments,
customerNumber
);

3. Write SQL query to show all the columns data from the **Orders** Table.
Ans.) SELECT * FROM Orders;

4. Write SQL query to show all the comments from the **Orders** Table.
  Ans.) SELECT comments FROM Orders ;

5. Write a SQL query to show orderDate and Total number of orders placed on that date, from **Orders** table.
 Ans.)   SELECT COUNT(orderDate)
         FROM Orders
         WHERE DATE(ordeDate) = curdate();

6. Write a SQL query to show employeNumber, lastName, firstName of all the employees from **employees**
   table.
   Ans.)   SELECT employeeNumber, lastName, firstName
          FROM employees;

7. Write a SQL query to show all orderNumber, customerName of the person who placed the respective order.
   Ans.)   SELECT orderNumber, customerName
           FROM Orders;

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

   Ans.)   SELECT customerName, salesRepEmployeeNumber
           FROM Customers;

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.

Ans.)First we will create the table payments:------

CREATE TABLE payments(

customerNumber,

checkNumber,

 paymentDate,

amount);

Then for extracting the above data query is:----

 SELECT paymentDate,amount FROM payments;

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

Ans.)First we will create table :--------

  CEATE TABLE products (
  productCode
  productName,
  productLine,
  productScale,
  productVendor
  productDescription
 quantityInStock
 buyPrice
 MSRP);

 To extract the data we will write query:-------------

  SELECT productName, productDescription,MSRP FROM products;

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

Ans.) SELECT p.`productName`, p.` productDescription `, SUM(o.`quantityOrdered`) AS quantity
FROM `orderdetails` AS o
INNER JOIN `products` AS p
ON o.`productCode` = p.`productCode`
GROUP BY o.`productCode`
ORDER BY SUM(o.`quantityOrdered`) DESC, p.`productName` ASC

12. Write a SQL query to print the city name where maximum number of orders were placed.
 Ans.) SELECT city, count(orderNumber) FROM customers,orders orderby count(orderNumber) groupby city ;

13. Write a SQL query to get the name of the state having maximum number of customers.
 Ans.) SELECT state, count(customerNumber) FROM Customers orderby count(customerNumber) groupby state ;

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.
 Ans.) SELECT employeeNumber, concat(firstName, lastName) as fullName 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).

Ans.) SELECT customer Name , orderNumber, quantityOrdered *priceEach as TotalAmount FROM customers,orderdetails;