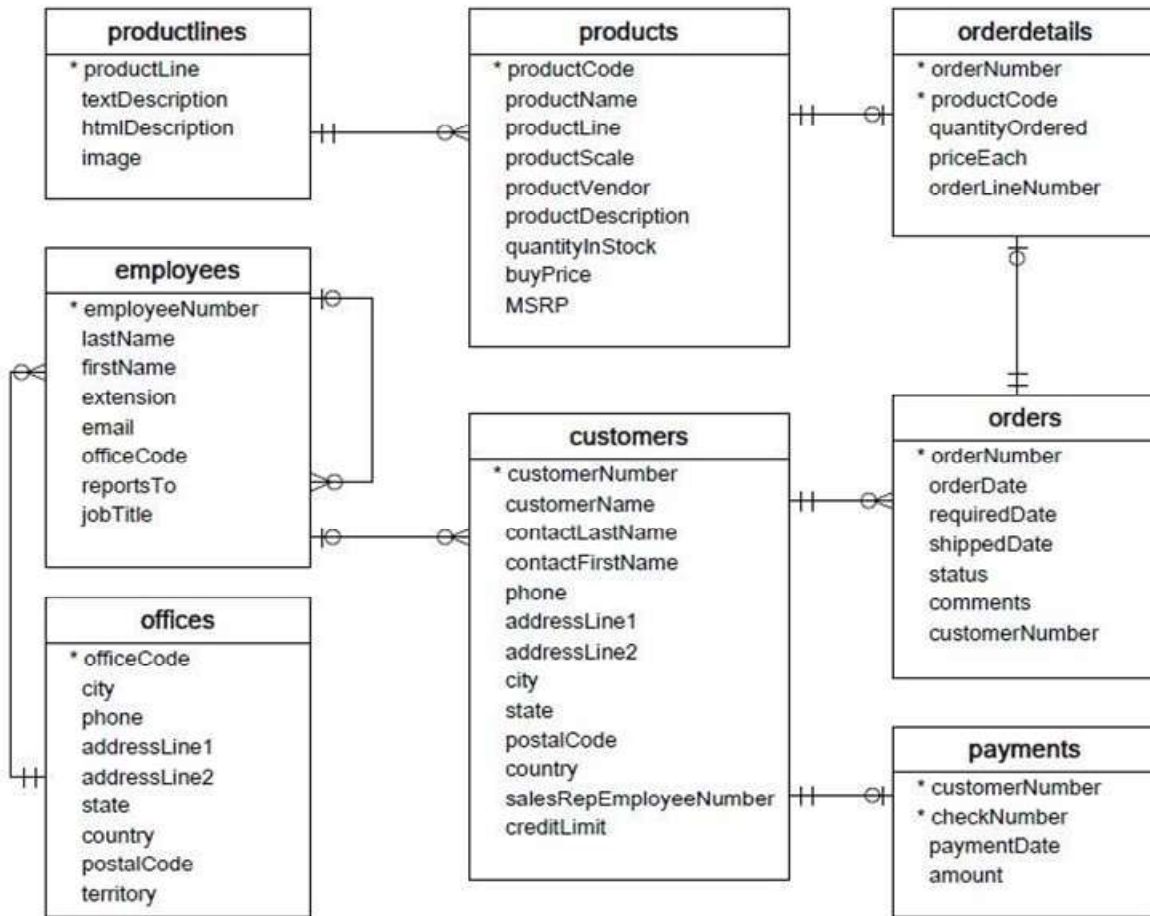# WORKSHEET 3 SQL

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: cursor.execute("CREATE TABLE Customers (customerNumber INT PRIMARY KEY, customerName TEXT, contactLastName TEXT, contactFirstName TEXT,phone INT, addressLine1 TEXT, addressLine2 TEXT, city TEXT, state TEXT, postalCode INT, country TEXt,salesRepEmployeeNumber INT, creditLimit TEXT)")

2. Write SQL query to create table **Orders.**
   Ans: cursor.execute("CREATE TABLE Orders (orderNumber INT PRIMARY KEY, ordetDate INT, requiredDate INT, shippedDate INT, status TEXT, comments TEXT, customerNumber INT, foreign key (customerNumber) references Customers (customerNumber))")

3. Write SQL query to show all the columns data from the **Orders** Table.
   Ans: result = cursor.execute("SELECT * FROM Orders")
          for row in enumerate (result,1):
          print(row)

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 orderDate FROM Orders
         Print (cursor.rowcount)

6. Write a SQL query to show employeNumber, lastName, firstName of all the employees from **employees** table.
   Ans: SELECT employeNumber, 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 FROM Orders UNION SELECT customerName FORM Customers

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: SELECT paymentDate, amount FROM payments

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

11. Write a SQL query to print the productName, productDescription of the most ordered product.
    Ans: SELECT productName, productDescription FROM products WERE quantityInStock S

12. Write a SQL query to print the city name where maximum number of orders were placed.
Ans: SELECT COUNT(*) FROM Customers WHERE max(city)

13. Write a SQL query to get the name of the state having maximum number of customers.
    Ans: SELECT COUNT(*) FROM Customers WHERE max(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, firstName+lastName as fullName FORM 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 orderNumber FORM Orders UNION SELECT customerName FORM Customers WHERE (SELECT quantityOrdered x priceEach as TotalAmount) FORM Orderdetials