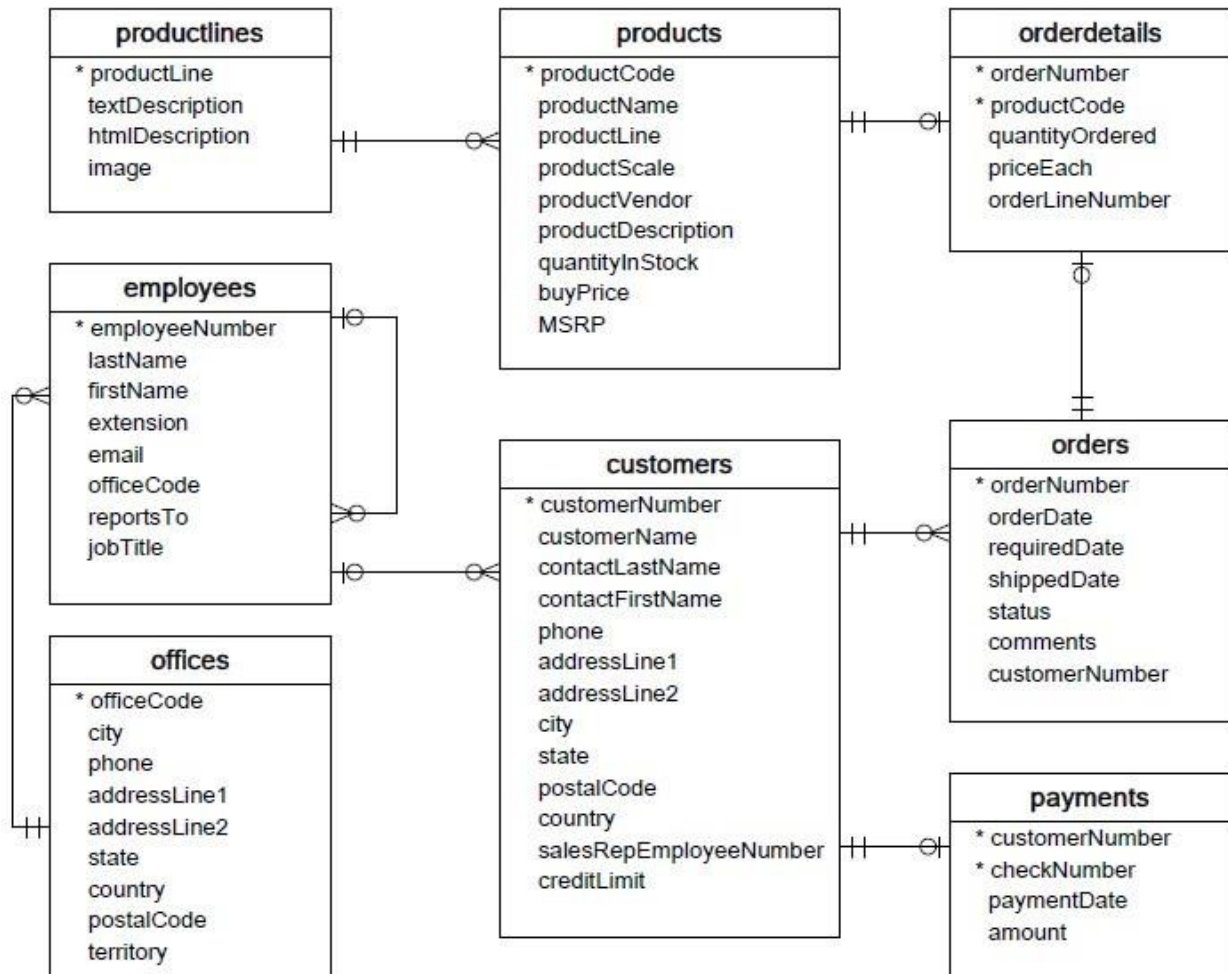# WORKSHEET 3 SQL

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.
   sql_command = "CREATE TABLE customers(customerNo INTEGER PRIMARY KEY,customerName SALAM(30),contactLastName SALAM(15),contactFirstName SALAM(15), phone INTEGER(10), addressline1 SALAM(30), addressline2 SALAM(30), city LAM(20), state LAM(20), postalcode INTEGER(6), country LAM(10), salesRepEmployeeNumber INTEGER(30), creditLimit INTEGER(10))"
   # execute code
   Cursor.execute(sql_command)
   # save
   Conn.commit()

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

   Answer.

   Sql_command = "CREATE TABLE orders(orderNo INTEGER PRIMARY KEY, orderDate DATE(10), requiredDate DATE(10), shippedDate DATE(10), status LAM(10), comments SALAM(30), customerNo INTEGER(15), FOREIGN KEY (customerNo), REFERENCES customers (customerNo))"
   # execute
   Cursor.execute(sql_command)
   # save
   Conn.commit()

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

   Answer.

   Sql_command = "SELECT*FROM orders"
   Select=cursor.execute(sql_command)
   For i in select:
   Print(i)

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

   Answer.

   Sql_command = "SELECT comments FROM orders"
   Select=cursor.execute(sql_command)
   for i in select:
   print(i)

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

   Answer.

   Sql_command = "SELECT" date(orderDate), COUNT(*) FROM orders GROUP BY date(orderDate)"
   Select = cursor.execute(sql_command)
   for i in select:
   print(i)

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

   Answer.

   sql_command = "SELECT EmployeeNO,LastName,FirstName FROM Employees"
   select= cursor.execute(sql_command)
   for i in select:
   print(i)

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

Answer.

Sql_command = "SELECT orders.customerNo,customers.customerName From orders,customers WHERE orders.customerNo"
Select = cursor.execute(sql_command)
for i in select:
print(i)

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

Answer.

Sql_command = "SELECT customers.customerName,Employees.FirstName(("))LastNamw AS FullName
FROM customers, Employees WHERE customers.SalesRepEmployeeNumber= Employees.EmployeeNO"
Select= cursor.execute(sql_command)
for i in select:
print(i)

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.

   Answer.

   Sql_command = "SELECT" date(PaymentDate), SUM(Amount) FROM payments GROUP BY

   date(paymentDate)"

   select= cursor.execute(sql_command)

   for i in select:

   print(i)

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

    Answer.

    Sql_command = "SELECT ProductName,MSRP,ProductDescription FROM Products"
    Select= cursor.execute(sql_command)
    for i in select:
    print(i)

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

    Answer.

    Sql_command = "SELECT Products.ProductName,Products.ProductDescription,
    SUM(OrderDetails.QuantityOrdered) AS QuantityOrdered FROM pProducts INNER JOIN
    OrederDetails ON OrderDetails.ProductCode= Products.ProductCode GROUP BY
    OrderDetails.WuantityOrdered"
    Select= cursor.execute(sql_command)
    for i in select:
    print(i)

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

    Answer.

    Sql_command = "SELECT Customers.City, SUM(OrderDetails.QuantityOrdered) AS QuantityOrdered
    FROM Customer INNER JOIN OrderDetails, Order ON Customers.CustomersNO=
    Orders.CustomerNO and Orders.OrderNO = OrderDetails.OrderNo GROUP BY
    OrderDetails.QuantityOrdered"
    Select = cursor.execute(sql_command)
    for i in select:
    print(i)

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

    Answer.

    Sql_command = "SELECT State,COUNT(*) AS Max_Customer FROM Customers GROUP BY Ste
    OREDR BY COUNT(*)DESC"
    Select = cursor.execute

for i in select:
print(i)

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.

Answer.

Sql_command = "SELECT EmployeeNO,FirstName(("))LastName AS FullName FROM Employees"
Select= cursor.execute(sql_command)
for i in select:
print(i)

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

Answer.

Sql_command = "SELECT OrderDetails.OrderNo, Customer.CustomerName, (OrderDetails.QuantityOrdered* OderDetails.PriceEach) AS A mount FROM OrderDetails INNER JOIN Customer, Orders ON, Customers.CustomerNo = Orders.CustomerNo and OrderDetails.OrderNo = Orders.OrderNo"
Select= cursor.excute(sql_commad)
for I in select:
print(i)