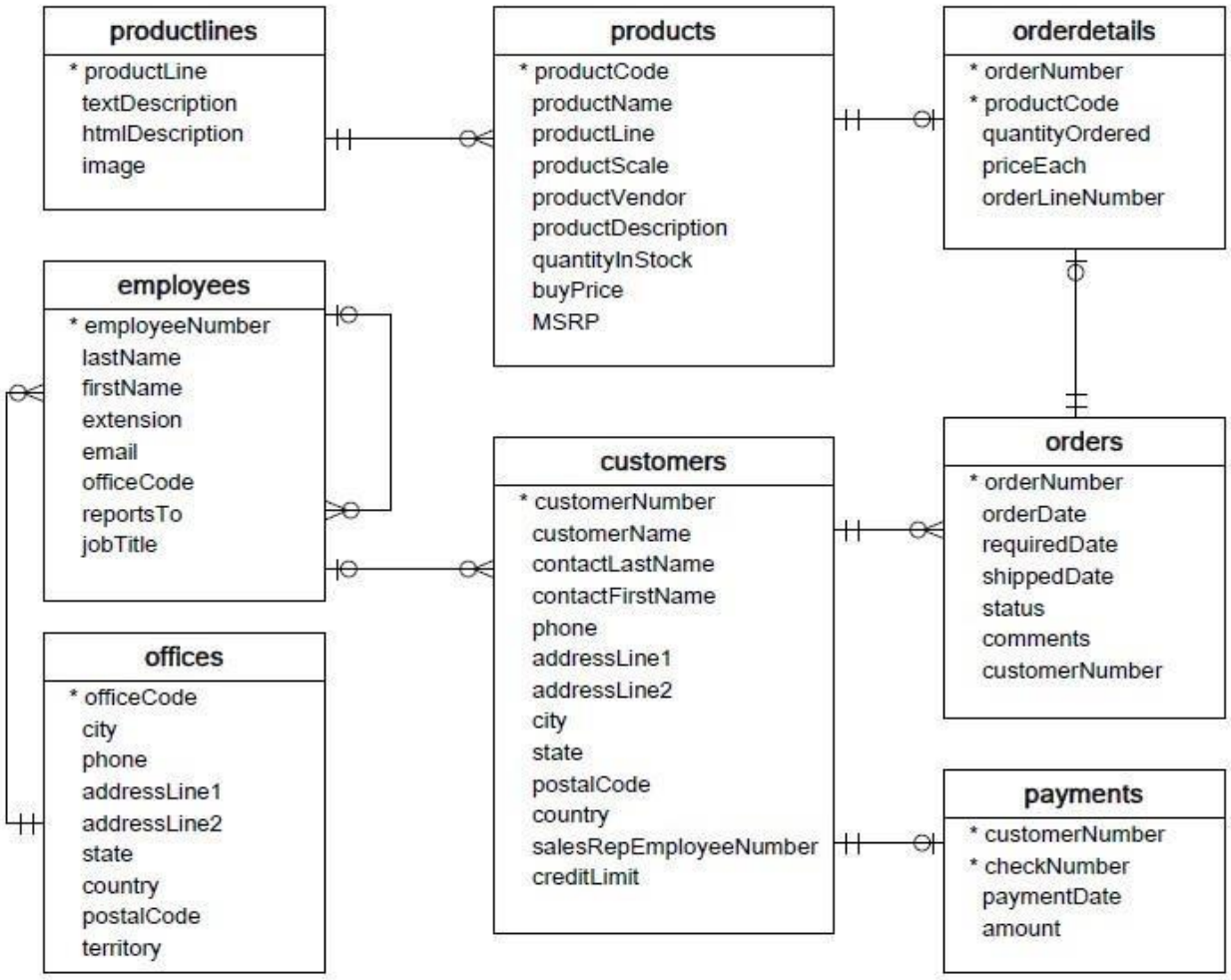
WORKSHEET 3
SQL

Refer the following ERD and answer all the questions in this worksheet. You have to write the queries usingmysql 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.**
   cursor.execute("CREATE TABLE customers(customerNumber INT primary key,customerName VARCHAR(45) NOT NULL,contactLastName VARCHAR(20),contactFirstName VARCHAR(20),phone int(10), addressLine1 VARCHAR(50), addressLine2 VARCHAR(50), city CHAR(50), state VARCHAR(25), postalcode int(10), country VARCHAR(50),salesRepEmployeeNumber INT, creditlimit int(20))");

2. Write SQL query to create table **Orders.**
cursor.execute("CREATE TABLE orders(orderNumber INT NOT NULL, orderDate DATE, requiredDate DATE, shippedDate DATE, status VARCHAR(100), comments VARCHAR(50), customerNumber INT, PRIMARY KEY (orderNumber),FOREIGN KEY (customerNumber) REFERENCES customers(customerNumber))");

3. Write SQL query to show all the columns data from the **Orders** Table.
Result = cursor.execute("Select * from orders");
Result.fetchall()

4. Write SQL query to show all the comments from the **Orders** Table.
Result = cursor.execute("Select comments from orders");
For row in Result:
Print(row)

5. Write a SQL query to show orderDate and Total number of orders placed on that date, from **Orders** table.
Result = cursor.execute("Select orderDate, SUM from orders where orderDate=2022-12-10");
Result.fetchall()

6. Write a SQL query to show employeNumber, lastName, firstName of all the employees from **employees** table.
Result = cursor.execute("Select employeNumber, lastName, firstName from Employees");
Result.fetchall()

7. Write a SQL query to show all orderNumber, customerName of the person who placed the respective order.
Result = cursor.execute("Select orders.orderNumber, customers.customerName from orders, customers WHERE customers.customerNumber = orders.customerNumber");
Result.fetchall()

8. Write a SQL query to show name of all the customers in one column and salary employee name in anothercolumn.
Result = cursor.execute("Select customers.customerName, employees.firstName, employees.lastName from customers, employees WHERE customers.salesRepEmployeeNumber=employees.employeeNumber");
Result.fetchall()

9. Write a SQL query to show Date in one column and total payment amount of the payments made on that datefrom the **payments** table.
Result = cursor.execute("Select paymentDate, sum(amount) from payments GROUP BY paymentDate");
Result.fetchall()

10. Write a SQL query to show all the products productName, MSRP, productDescription from the **products** table.
Result = cursor.execute("Select productName, MSRP, productDescription from products");
Result.fetchall()

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

Result = cursor.execute("SELECT MAX(orderdetails.quantityOrdered) , products.productName, products.productDescription from products, orderdetails WHERE orderdetails.productCode = products.productCode");

Result.fetchall()

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

Result = cursor.execute("SELECT customers.city FROM customers WHERE MAX(count(DISTINCT orders.orderNumber");

Result.fetchall()

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

Result = cursor.execute("SELECT state FROM customers WHERE max(GROUP BY state"));

Result.fetchall()

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

Result = cursor.execute("SELECT employeeNumber, CONCAT(firstName,lastName) employeeName FROM employees");

Result.fetchall()

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

Result = cursor.execute("SELECT customers.customerName, orderdetails.orderNumber, orderdetails.quantityOrdered * orderdetails.priceEach FROM orderdetails JOIN orders ON orderdetails.orderNumber = orders.orderNumber JOIN customers ON orders.orderNumber = customers.customerNumber");

Result.fetchall()