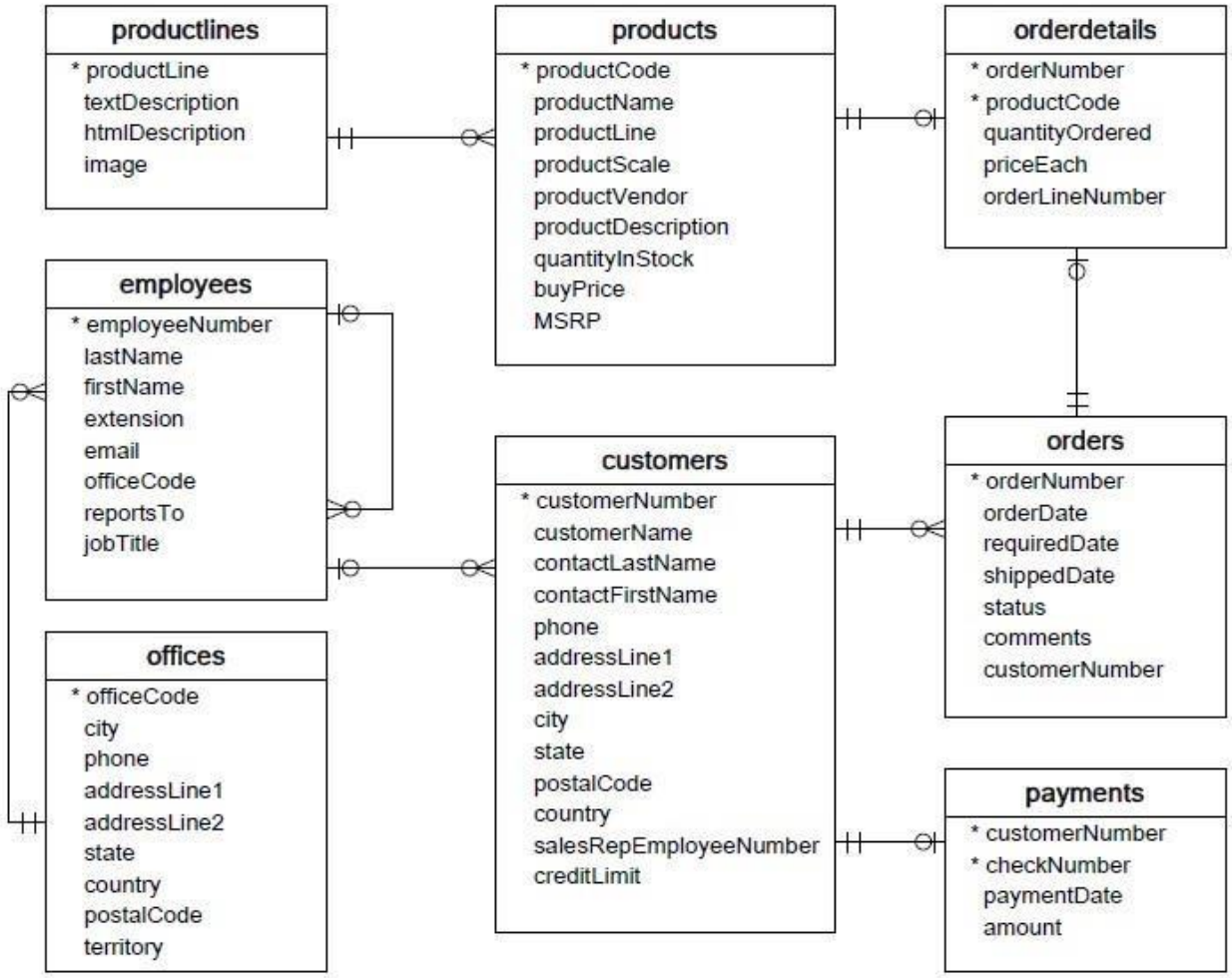
WORKSHEET 3 SQL

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.
- **Product Lines:** stores a list of product line categories.
- **Orders:** stores sales orders placed by customers.
- **Order Details:** 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 text NOT NULL,
contactLastName text NOT NULL,
contactFirstName text NOT NULL,

phone text NOT NULL,
addressLine1 text NOT NULL,
addressLine2 text ,
city text NOT NULL,
state text NOT NULL,
postalCode text NOT NULL,
country text NOT NULL,
salesRepEmployeeNumber int, FOREIGN KEY(salesRepEmployeeNumber) REFERENCES employee(employeeNumber),
creditLimit real)")

2. Write SQL query to create table Orders.

Answer:

("CREATE TABLE orders (orderNumber int PRIMARY KEY,
orderDate date NOT NULL,
requiredDate date NOT NULL,
shippedDate date NOT NULL,
status text NOT NULL,
comments text,
customerNumber int, FOREIGN KEY (customerNumber) REFERENCES customers (customerNumber))")

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

Answer:

("SELECT * FROM orders")

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

Answer:

("SELECT comments FROM orders")

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

Answer:

("SELECT orderDate, COUNT (orderDate) FROM orders GROUP BY orderDate ORDER BY COUNT (orderDate)")

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

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Answer:
("SELECT employeeNumber, lastName, firstName FROM employees")

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

Answer:

("SELECT o.orderNumber FROM orders LEFT JOIN customers ON c.customerName, c.customerNumber = o.customerNumber GROUP BY orderNumber")

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

Answer:

("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.

Answer:

("SELECT amount, 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.

Answer:

("SELECT productName, MSRP, productDescription FROM products")

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

Answer:

("SELECT productName, COUNT(productName), productDescription FROM products GROUP BY productName ORDER BY COUNT(productName)")

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

Answer:

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("SELECT orderNumber, COUNT (orderNumber) FROM orders GROUP BY orderNumber ORDER BY city ")

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

Answer:

("SELECT customerNumber COUNT (customerNumber) FROM customers GROUP BY customerNumber ORDER BY 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.

Answer:

("SELECT employeeNumber, FullName= [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).

Answer:

```
("SELECT c.customerNumber, c.customerName SUM (od.quantityOrdered *
  od.priceEach) as Total_Amount FROM Customers c INNER JOIN orders o
  ON c.customerNumber = o.customerNumber JOIN
  orderdetails od ON o.orderNumber = od.orderNumber  JOIN products p
  ON od.productCode = p.productCode
  GROUP BY customerNumber")
```