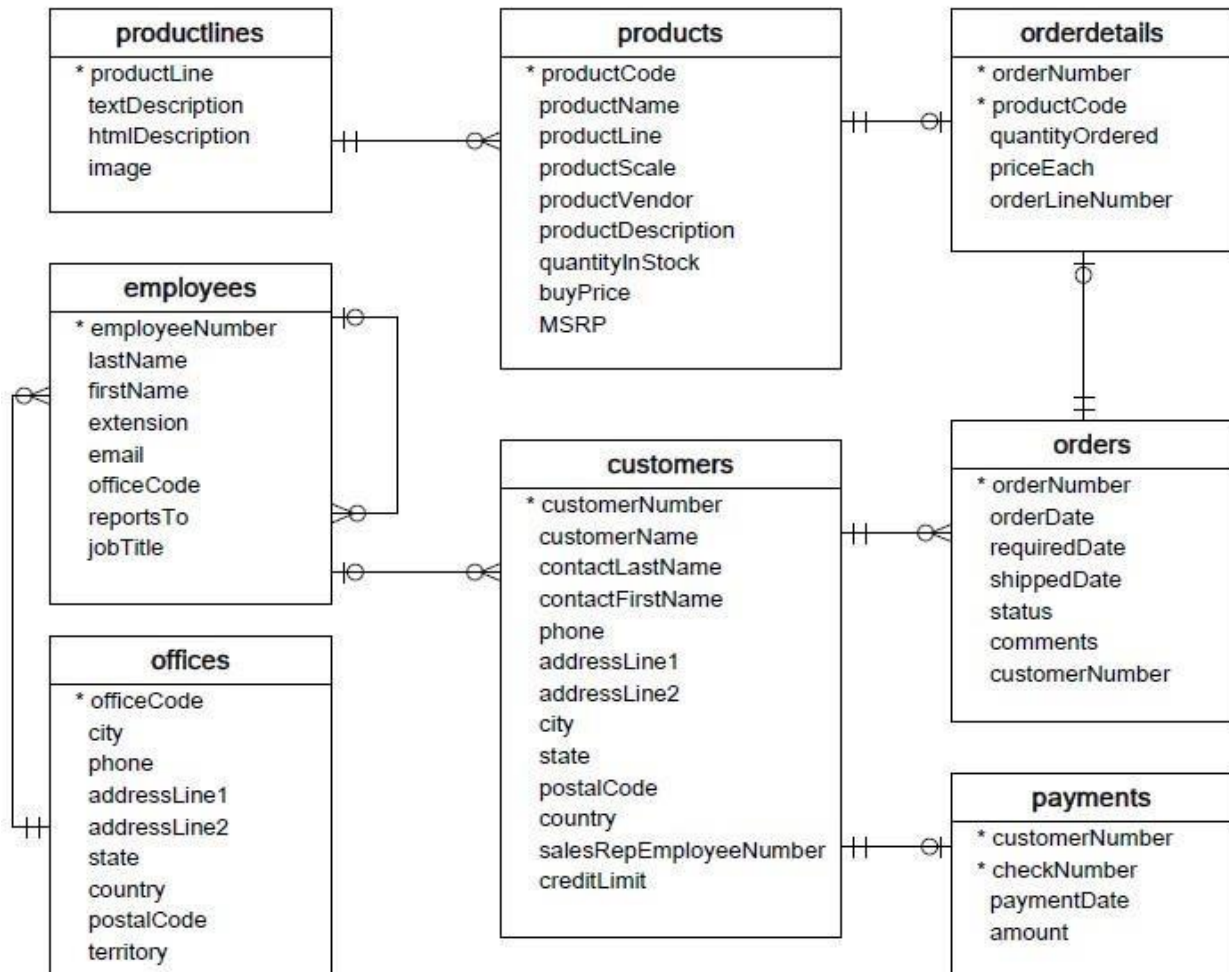


## WORKSHEET 3 SQL

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 –

Create table Customers (customerNumber INT PRIMARY KEY, customerName VARCHAR(20), contactLastName VARCHAR(20), contactFirstName VARCHAR(20), phone INT, addressLine1 VARCHAR(20), addressLine2 VARCHAR(20), city VARCHAR(10), state VARCHAR(20), postalcode INT, country VARCHAR(20), salesRepEmployeeNumber INT, creditLimit INT );

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

Answer –

**Create table orders (orderNumber INT PRIMARY KEY, orderDate DATE, requiredDate DATE, shippedDate DATE, status VARCHAR(20) , comments VARCHAR(20), 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 o.orderDate, SUM(od.quantityOrdered) FROM orders o, orderDetails od  
GROUP BY o.orderDate;**

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

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 orders.orderNumber, Customers.customerName FROM orders INNER JOIN Customers ON  
orders. customerNumber =Customers. customerNumber;**

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

Answer –

**SELECT customerName, salesEmployeeNumber FROM Customers;**

**OR**

**SELECT c.customerName, e.firstName  
FROM c.customers  
LEFTJOIN e.employees ON c.salesRepEmployeeNumber = e.employeeNumber  
ORDER BY c.customerNumber;**

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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 paymentDate, SUM(amount) 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 p. productName, p. productDescription FROM orderdetails AS o INNER JOIN products AS p ON o.productCode = p.productCode WHERE o.quantityOrdered = (SELECT MAX(quantityOrdered) FROM orderDetails)**

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

Answer – **SELECT c.city FROM customer c, orders o, orderDetails od WHERE c.customerNumber = o.customerNumber AND o.orderNumbe = od.orderDetails AND od.quantityordered =(SELECT MAX(quantityOrdered) FROM orderDetails);**

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

Answer –

**SELECT state, COUNT(state) FROM customers GROUP BY state ORDER BY 2 DESC LIMIT 1;**

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, 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).

Answer –

**SELECT o.orderNumber, c.csutomerName, SUM(od.priceEach) As totalAmount FROM orders o, customer c, orderDetails od WHERE od.orderNumber = o.orderNumber AND o.custNumber = c.custNumber GROUP BY orderNumber;**



- <https://www.mysqltutorial.org/mysql-sample-database.aspx>
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