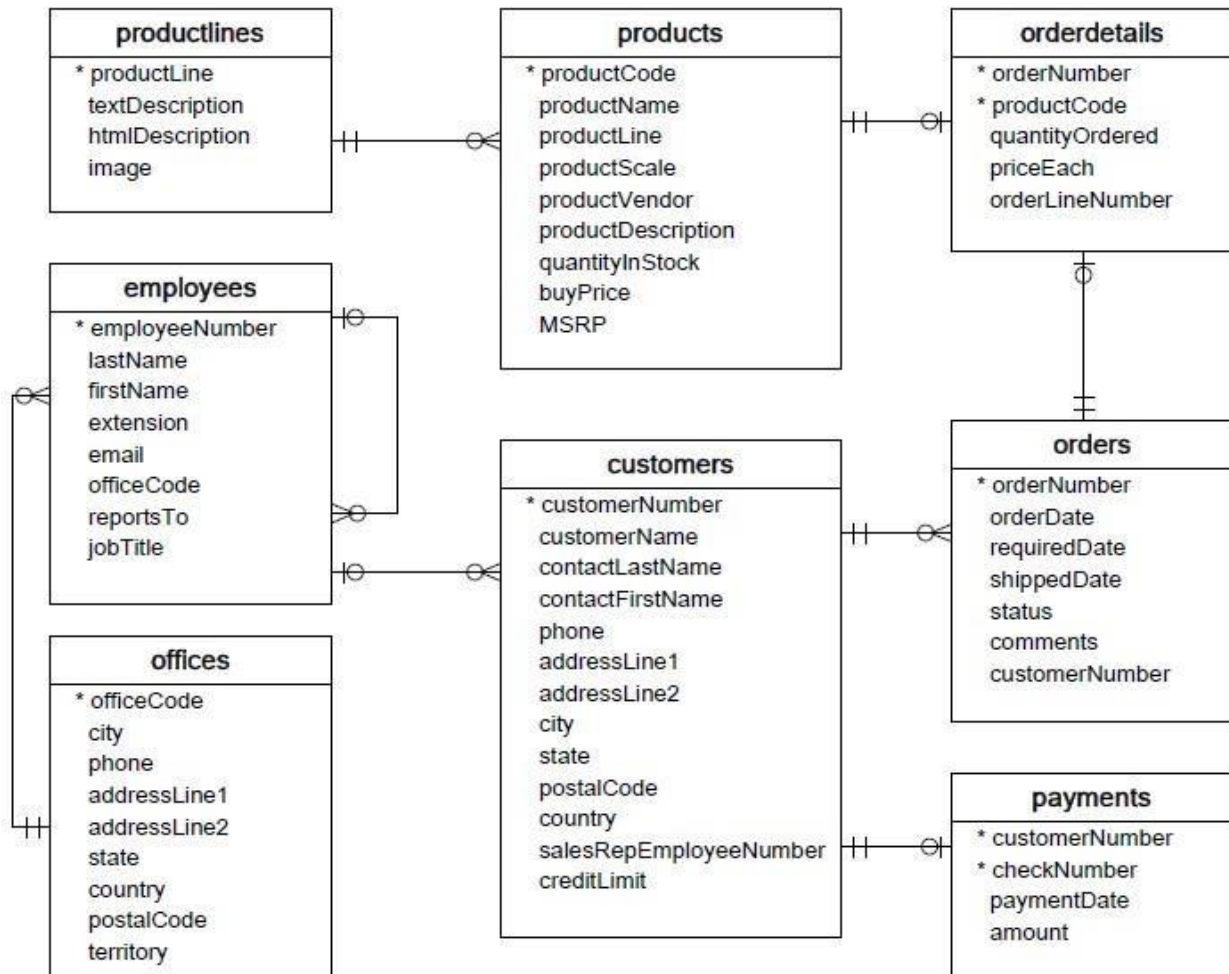


WORKSHEET 3 SQL

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 :- CREATE TABLE Customers (
 CustomerNumber int NOT NULL,
 customerName varchar(255),
 contactLastName varchar(255),
 contactFirstName varchar(255),

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Phone int,  
addressLine1 varchar(255),  
addressLine2 varchar(255),  
city varchar(255),  
state varchar(255),  
postalcode int,  
country varchar(255),  
SalesRepEmployeeNumber int,  
creditLimit int,  
PRIMARY KEY (CustomerNumber),  
FOREIGN KEY (SalesRepEmployeeNumber) REFERENCES employees(employeeNumber)  
);
```

2. Write SQL query to create table Orders.

Ans :- CREATE TABLE Orders (
 orderNumber int NOT NULL,
 orderDate date,
 requiredDate date,
 shippedDate date,
 status varchar(255),
 comments varchar(255),
 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.

Ans :- select * from Orders;

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, count(OrderNumber) as TOTAL_NUMBER_OF_ORDERS FROM Orders GROUP BY orderDate;

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

Ans :- SELECT EmployeeNumber, LastName, FirstName from employees;

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

Ans :- select a.orderNumber, b.customerName from Orders a, Customers b where a.customerNumber=b.CustomerNumber;

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

Ans :- SELECT b.customerName as Customer_Name, RTRIM(LTRIM(CONCAT(COALESCE(a.lastName + ' ', ''), COALESCE(a.firstName + ' ', '')))) AS Sales_Rep_Employee_Name FROM employees a, Customers b where a.employeeNumber=b.SalesRepEmployeeNumber;

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 as Date, sum(amount) from payments GROUP BY paymentDate;

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 p.productName, p.productDescription FROM orderdetails AS o INNER JOIN products AS p ON o.productCode = p.productCode GROUP BY o.productCode ORDER BY SUM(o.quantityOrdered) DESC, p.productName ASC

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

Ans :- select a.city, count(b.orderNumber) as NUMBER_OF_ORDERS from Customers a, Orders b where a.customerNumber = b.customerNumber GROUP BY a.city ORDER BY NUMBER_OF_ORDERS DESC;

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

Ans :- select state, count(customerNumber) as NUMBER_OF_Customers from Customers GROUP BY state ORDER BY NUMBER_OF_Customers DESC;

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.

Ans :- SELECT employeeNumber, RTRIM(LTRIM(CONCAT(COALESCE(lastName + ' ', ''), COALESCE(firstName + ' ', '')))) AS Employee_Full_Name FROM employees;

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

Ans :- select c.orderNumber as ORDER_NUMBER, b.customerName as Customer_Name, c.quantity_ordered*c.priceEach as Total_Amount_Paid from Orders a INNER JOIN Customers b ON a.customerNumber=b.CustomerNumber INNER JOIN orderdetails c ON a.orderNumber = c.orderNumber GROUP BY c.orderNumber;

