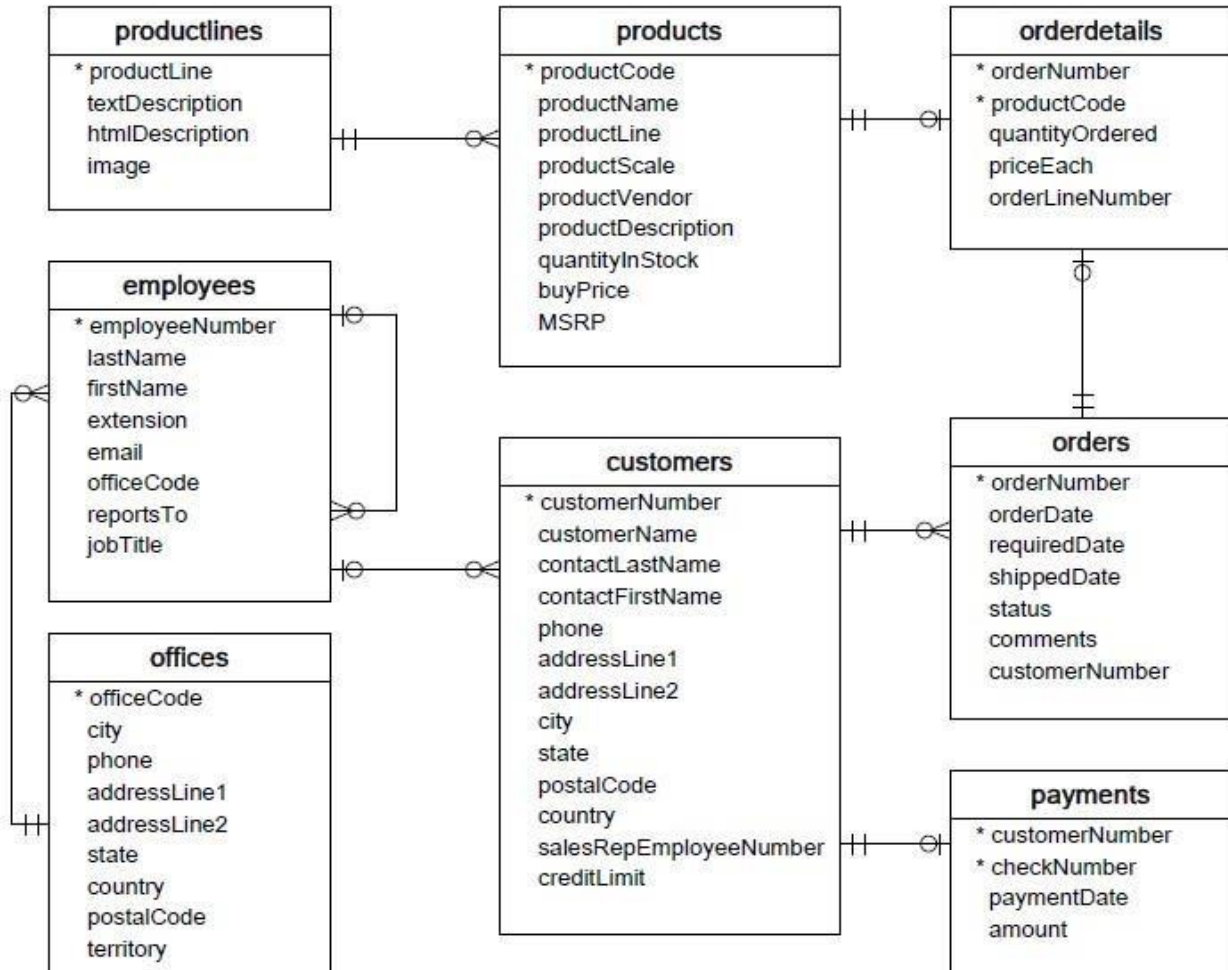


WORKSHEET 3 SQL

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: `cur.execute("create table Customers (customerNumber int primary key, customerName text, contactLastName text, contactFirstName text, phone int, addressLine1 text, addressLine2 text, city text, state text, postalCode int, country text, salesRepEmployeeNumber int, creditLimit int)")`

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

Answer: `cur.execute("create table Orders (orderNumber int primary key, orderDate date, requiredDate date, shippedDate date, status text, comments text, customerNumber int)")`

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

Answer: `result=cur.execute("select * from Orders")`
`result.fetchall()`

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

Answer: result=cur.execute('select comments from Orders')
result.fetchall()

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

Answer: result=cur.execute("select orderDate,count(orderNumber) from Orders where
orderDate='YYYY-MM-DD'")
result.fetchall()

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

Answer: cur.execute("create table Employees (employeeNumber int primary key,lastName
text,firstName text,extension int,email text,officeCode int,reportsTo text,jobTitle text)")

result=cur.execute('select employeeNumber,lastName,firstName from Employees')
result.fetchall()

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

Answer: result =cur.execute('select Orders.orderNumber, Customers.customerName from Orders inner join
Customers on Orders.customerNumber=Customers.customerNumber')
result.fetchall()

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

Answer: result=cur.execute('select customerName,salesRepEmployeeNumber from Customers')
result.fetchall()

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: cur.execute("create table Payments (customerNumber int primary key,checknumber
int,paymentDate date,amount real)")

result=cur.execute('select paymentDate,sum(amount) from Payments')
result.fetchall()

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

Answer: cur.execute("create table Products (productCode int primary key, productName text,productLine
text, productScale text, productVendor text, productDescription text, quantityInStock int, buyPrice real,
MSRP real)")

results=cur.execute('select productName, MSRP, productDescription from Products')
results.fetchall()

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

Answer: cur.execute("create table Orderdetails (orderNumber int primary key,productCode
int,quantityOrdered int,priceEach real,orderLineNumber int)")

results=cur.execute('select Products.productName, Products.productDescription from Products
inner join Orderdetails on Products.productCode=Orderdetails.productCode')
results.fetchall()

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

Answer: results=cur.execute('select Orderdetails.orderNumber,Orders.customerNumber,Customers.city from Orderdetails join Orders on Orderdetails.orderNumber=Orders.orderNumber join Customers on Customers.customerNumber=Orders.customerNumber ')
results.fetchall()

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

Answer: results=cur.execute('select max(state),customerName from Customers')
results.fetchall()

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: results=cur.execute('select employeeNumber,firstname+" "+lastName as "fullName" from Employees')
results.fetchall()

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

Answer: results=cur.execute('select Orders.orderNumber,Customers.customerName,Payments.amount from Orders join Customers on Orders.customerNumber=Customers.customerNumber join Payments on Payments.customerNumber=Customers.customerNumber ')
results.fetchall()
