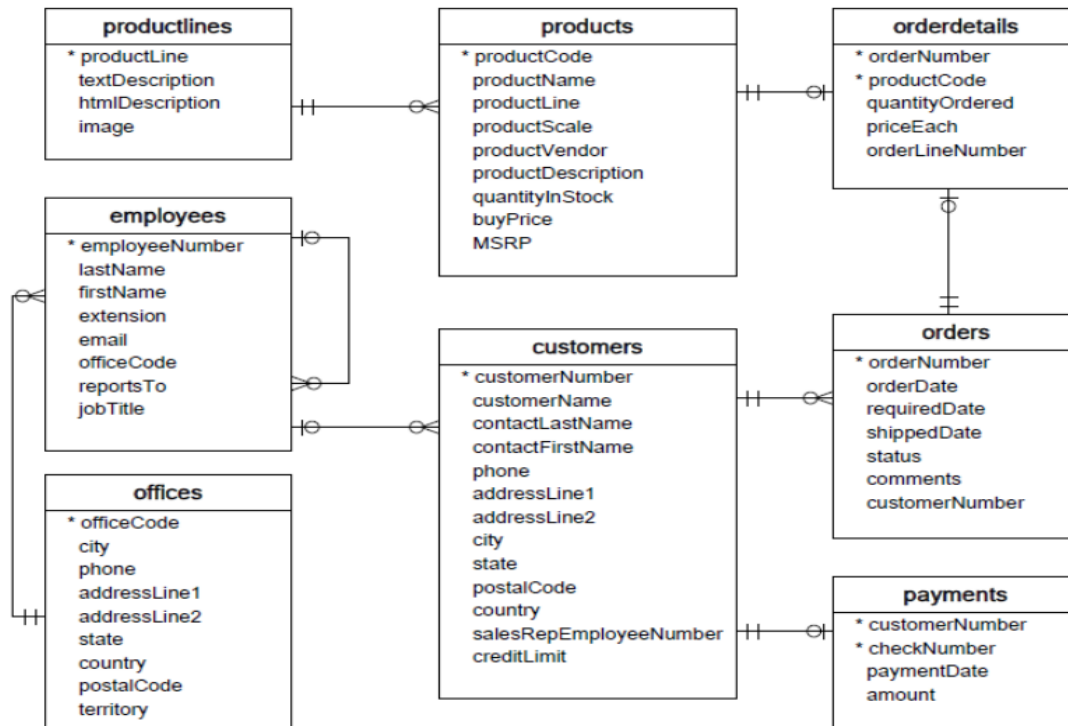


SQL – WORKSHEET 3

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 integer PRIMARY KEY,
customerName varchar(20),
customerLastName varchar(20),
customerFirstName varchar(20),
phone int,
```

```

addressLine1 varchar(50),
addressline2 varchar(50),
city varchar(20),
state varchar(20),
postalCode int,
country varchar(20),
salesRepEmployeeNumber int,
creditLimit int,

FOREIGN KEY(salesRepEmployeeNumber) REFERENCES
employees(employeeNumber));

CREATE TABLE customers(customerNumber integer PRIMARY KEY,
customerName varchar(20),
customerLastName varchar(20),
customerFirstName varchar(20),
phone int,
addressLine1 varchar(50),
addressline2 varchar(50),
city varchar(20),
state varchar(20),
postalCode int,
country varchar(20),
salesRepEmployeeNumber int,
creditLimit int,

FOREIGN KEY(salesRepEmployeeNumber) REFERENCES
employees(employeeNumber));

```

2. Write SQL query to create table Orders.

Ans: CREATE TABLE orders(orderNumber integer PRIMARY KEY,
orderDate date,
requiredDate date,
shippedDate date,
status char(15),
comments text,
customerNumber int,
FOREIGN KEY(customerNumber) REFERENCES customers(customerNumber));

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

Ans: SELECT * from Orders;

4. Write SQL query to show all the comments from the OrdersTable.

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) from orders group by orderDate;

6. Write a SQL query to show employeeNumber, lastName, firstName of all the employees from the 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 orderNumber, customerName from orders inner join customers on
orders.customerNumber=customers.customerNumber order by orderNumber;

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

Ans: SELECT customerName, concat(lastName, " ", firstName) from customers join
employees on customers.salesRepEmployeeNumber=employees.employeeNumber;

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, 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 products.productName, products.productDescription from orderdetails inner join products on orderdetails.productCode=products.productCode group by orderdetails.productCode order by count(orderdetails.productCode) desc limit 1;`

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

Ans: `SELECT customers.city,count(orders.orderNumber) as c from orders inner join customers on orders.customersNumber=customers.customernumber group by customers.city order by c desc limit 1;`

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

Ans: `Select state from customers group by state order by count(state) 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.

Ans: `SELECT employeeNumber, concat(lastName,firstName) 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).

Ans: `SELECT orderdetails.orderNumber,customerName,(priceEach*quantityOrdered) as total_amount from orders join orderdetails on orders.orderNumber=orderdetails.orderNumber join customers on customers.customerNumber=orders.customerNumber group by orderdetails.orderNumber order by orderdetails.orderNumber;`

