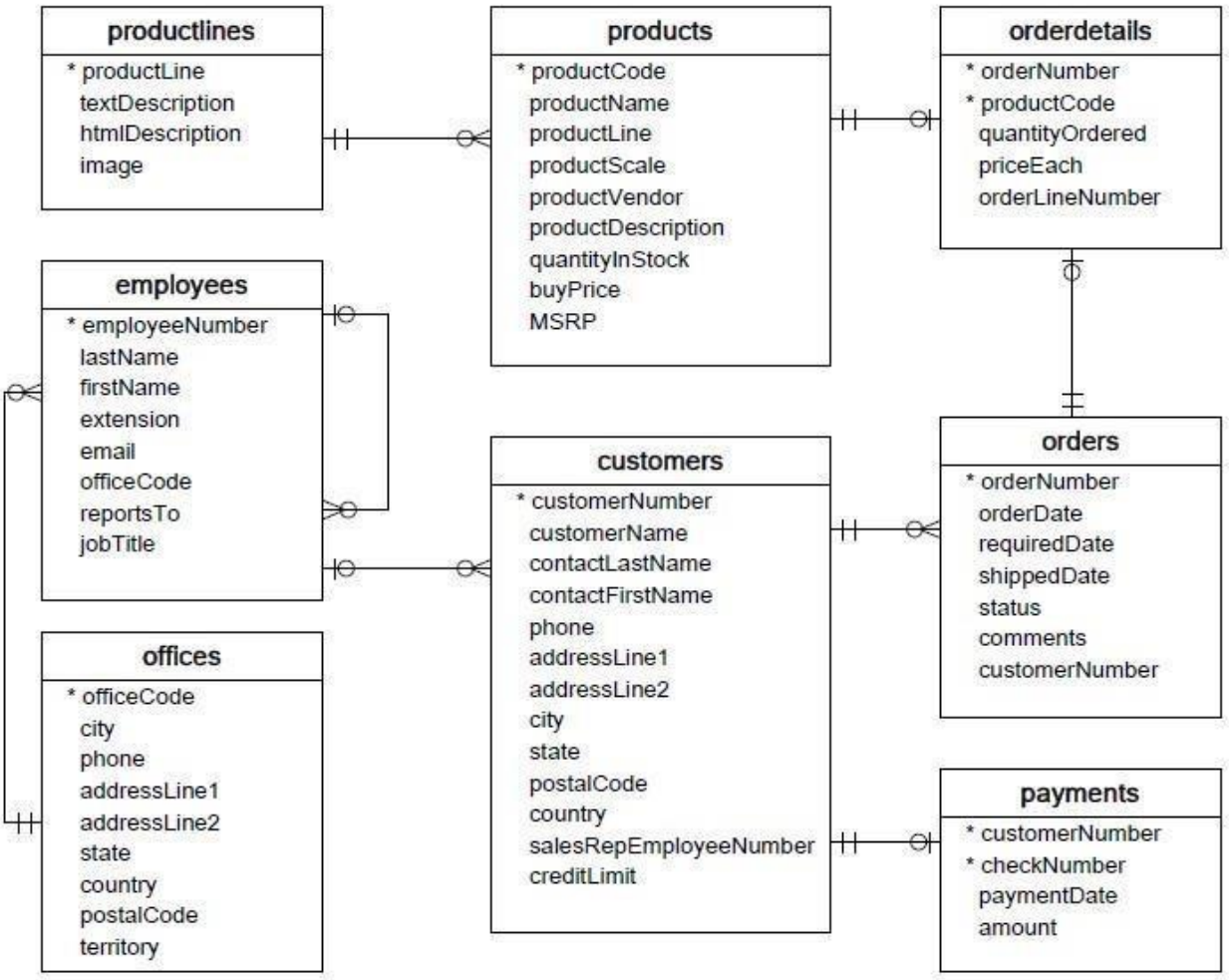
WORKSHEET

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.

WORKSHEET

1. *Write SQL query to create table* ***Customers.***

Answer –

```
CREATE TABLE customers (  customerNumber int
primary key NOT NULL,  customerName varchar(50)
NOT NULL,  contactLastName varchar(15) NOT
NULL,  contactFirstName varchar(30) NOT NULL,
phone int NOT NULL,  addressLine1 varchar(100)
NOT NULL,  addressLine2 varchar(60) NOT NULL,
city varchar(25) NOT NULL,  state varchar(20) NOT
NULL,  postalCode int NOT NULL,  country
varchar(20) NOT NULL,
salesRepEmployeeNumber varchar(20) NOT NULL,
creditLimit int NOT NULL);
```

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

Answer –

```
CREATE TABLE orders (
orderNumber int NOT NULL PRIMARY KEY,
orderDate DATE NOT NULL,  requiredDate DATE
NOT NULL,  shippedDate DATE NOT NULL,  status
varchar(100) NOT NULL,  comments varchar(100),
customerNumber int NOT NULL,
FOREIGN KEY (orderNumber) REFERENCES orderdetails(orderNumber) ON
DELETE CASCADE
FOREIGN KEY (customerNumber) REFERENCES
customers(CustomerNumber)
ON DELETE CASCADE  );
```

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;
```

WORKSHEET

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

Answer –

SELECT orderDate, COUNT(*) from orders GROUP BY orderDate;

6. *Write a SQL query to show employeNumber, 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, employees ORDER BY orderNumber ASC;

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

Answer –

SELECT customers.CustomerName AS “CustomerName, CONCAT(employees.firstName,’ ’,employees.lastName) salesrepName from customer,employees;

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;

WORKSHEET

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

Answer –

SELECT products.productName, products.productDescription from products where max(count(productCode));

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

Answer –

SELECT customers.city from customers where max(count(DISTINCT orders.orderNumber));

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

Answer –

SELECT state from customers where max(GROUP 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, CONCAT(firstName, lastName) employeeName 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 a.orderNumber, a.priceEach*a.quantityOrdered as totalamount, c.customerName FROM orderdetails a
JOIN orders b ON a.orderNumber = b.orderNumber
JOIN customers c ON b.customerNumber = c.customerNumber;