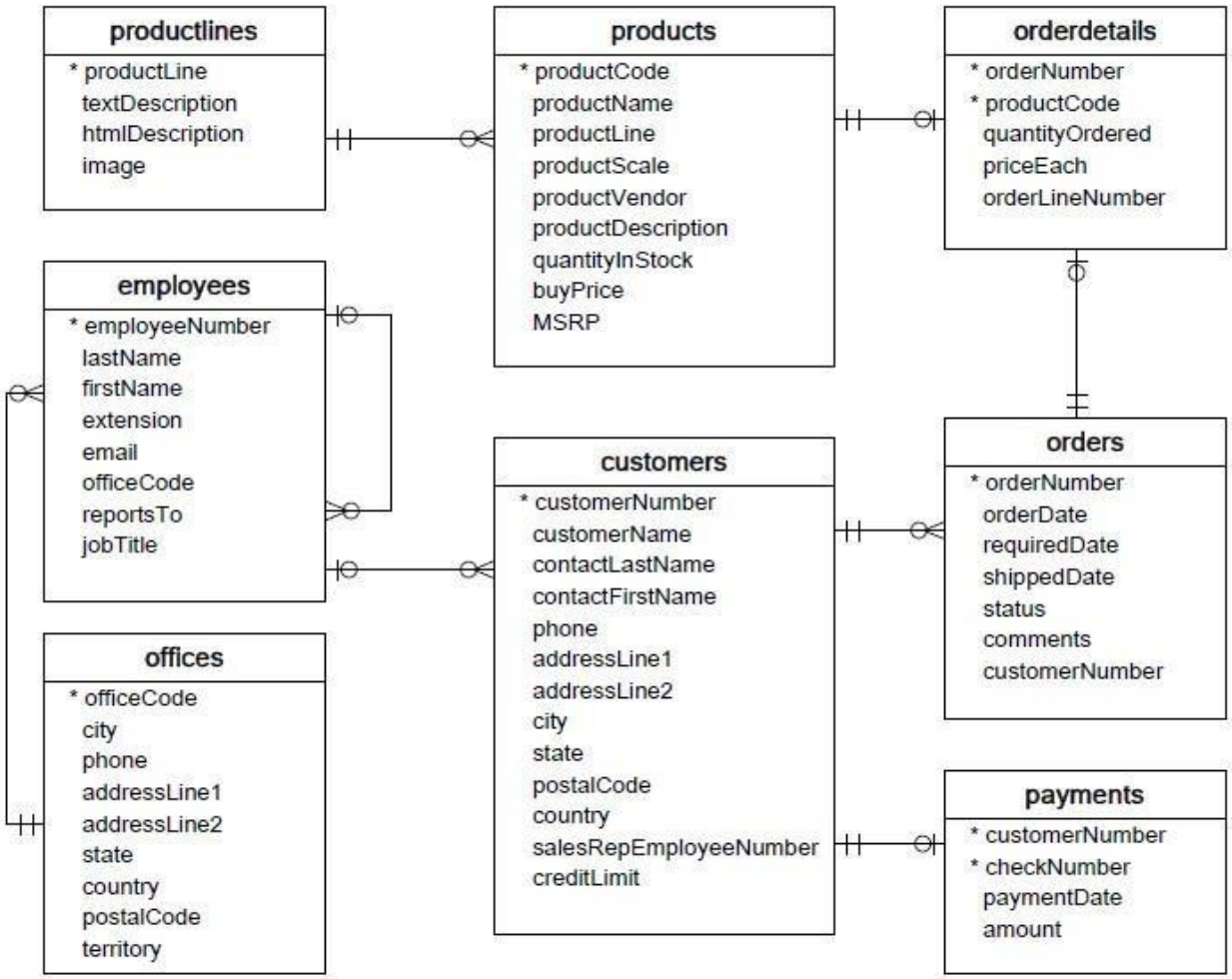
WORKSHEET 3 SQL

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 NOT NULL PRIMARY KEY,
    customerName varchar(255),
    contactLastName varchar(255),
    contactFirstName varchar(255),
    phone int(255),
    addressLine1 varchar(255),
    addressLine2 varchar(255),
```

```
city varchar(255),
state varchar(255),
postalCode int,
country varchar(255),
salesRepEmployeeNumber int,
FOREIGN KEY (salesRepEmployeeNumber) REFERENCES employees(employeeNumber),
creditLimit int
  );
```

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

Answer –

```
CREATE TABLE orders (
  orderNumber int NOT NULL PRIMARY KEY,
  orderDate date,
  requiredDate date,
  shippedDate date,
  status int(1),
  comments varchar(255),
  customerNumber int,
  FOREIGN KEY (customerNumber) REFERENCES customers(customerNumber)
    );
```

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

Answer –

```
SELECT `orderNumber`, `orderDate`, `requiredDate`, `shippedDate`, `status`, `comments`,
`customerNumber` FROM `orders`
Or
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 COUNT(`orderDate`), `orderDate` FROM `orders`
```

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

Answer –

```
SELECT  ` employeNumber `,`lastName`,`firstName` FROM `employees`
```

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

   Answer –
   SELECT o.`orderNumber`, c.`customerName` FROM `orders` as o INNER JOIN `customers` as c WHERE o.`customerNumber` = c.`customerNumber`

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

   Answer –
   SELECT c.`customerName`, e.`firstName` FROM `employees` as e INNER JOIN `customers` as c WHERE e.`employeeNumber` = c.`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.

   Answer-
   SELECT SUM(`amount`), `paymentDate` 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 products as p INNER JOIN orderdetails as o where o.productCode = p.productCode GROUP BY o.productCode ORDER BY COUNT(o.productCode) DESC LIMIT 1

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

    Answer-
    select c.city from customers as c INNER JOIN orders as o where o.customerNumber = c.customerNumber GROUP BY c.city ORDER BY COUNT(c.city) DESC LIMIT 1

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

    Answer –
    SELECT state, COUNT(state) as c 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.

    Answer –
    SELECT `employeeNumber`,CONCAT(`firstName`,' ',`lastName`) 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.`customerName`, (od.`quantityOrdered`* od.`priceEach`) as total_price FROM `orders` as o INNER JOIN `customers` as c INNER JOIN `orderdetails` as od where o.customerNumber = c.customerNumber and o.orderNumber = od.orderNumber