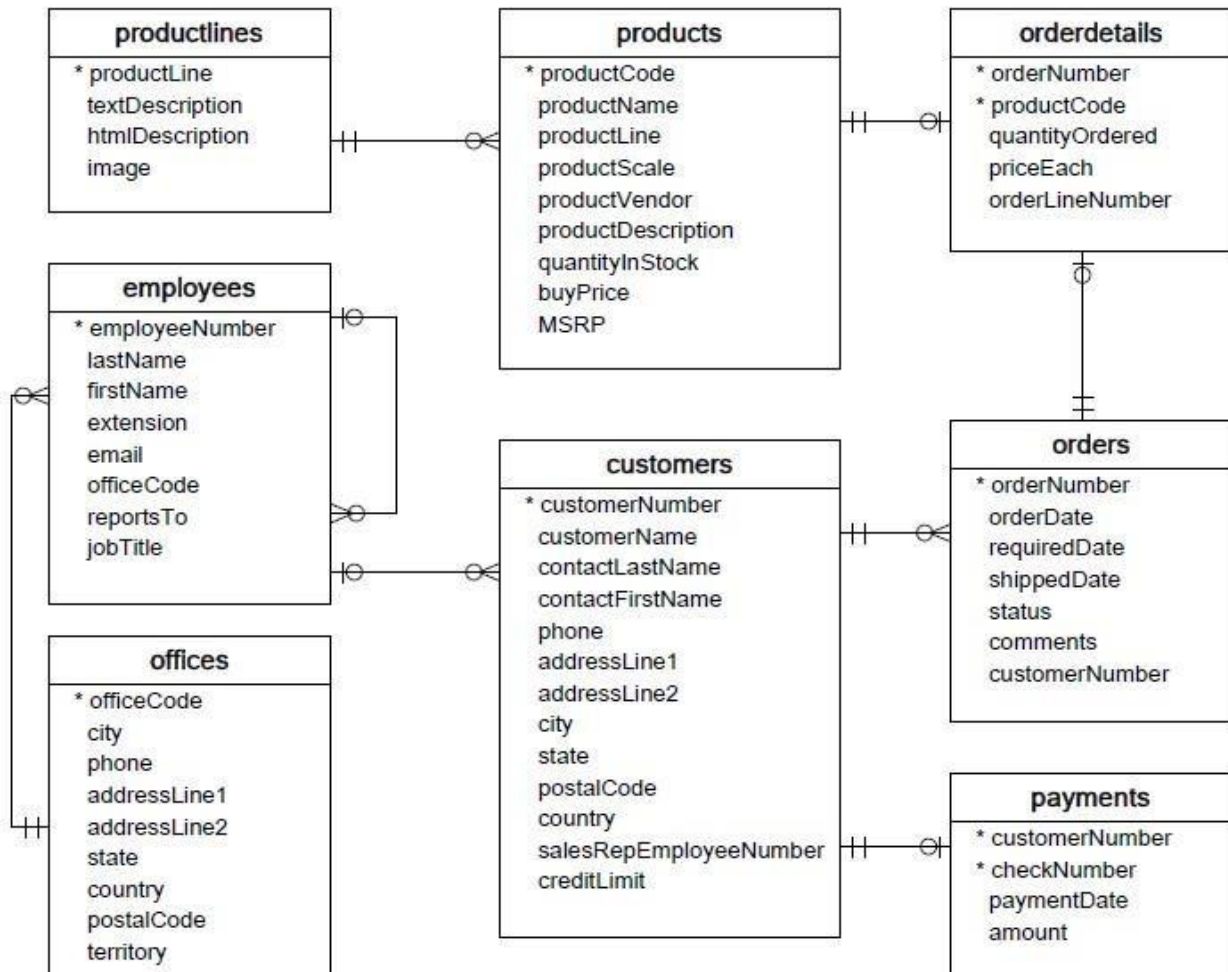# WORKSHEET 3 SQL

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(customer_id int NOT NULL,customer_name char(50) NOT NULL,contactLastName char(20),contactFirstName char(20),Phone_number int(10), addressLine1 char(50), addressLine2 char(50), city char(50), state char(25), postalcode int(10), country char(50),salesRepEmployeeNumber char(50), creditlimit int(20), PRIMARYKEY(customer_id))

2. Write SQL query to create table **Orders**
3. .
Ans. CREATE TABLE orders(orderNumber int(50) NOT NULL, orderdate date,requireddate date, shippeddate date, comments char(50),PRIMARY KEY (orderNumber), FOREIGN KEY (customer_id) REFERENCES customers(customer_id))

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

Ans. Select * from orders

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

Ans Select comments from orders

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

Ans. Select orderdate, count(*) from orders where orderdate='2022-09-10'.

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

Ans. Select employeeNumber, lastName, firstName from Employees.

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

Ans. Select o.orderNumber, c.customerName from orders o, customers c WHERE c.customer_id=o. customer_id

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

Ans.Select c.customerName, e.firstName from customers c, employees e, WHERE c.salesRepEmployeeNumber=e.employeeNumber

10. 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 date, count(*) from payment WHERE (TO_CHAR(payment_date,'Day'))='Monday

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

Ans. Select productName, MSRP, productDescription from products

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

Ans. select MAX(o.quantityordered) ,p.productName, p.productDescription from products p, orderdetails o WHERE orderdetails.productcode=products.productcode

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

Ans. Select c.customer_id,c.cityName, COUNT(orderNumber) from customers c, orders o GROUP BY customer_id, ORDER BY COUNT(orderNumber) DESC

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

Ans. Select TOP 1(c.customer_id), COUNT(o.orderNumber) as NoofOrd,state from customers c, orders o GROUP BY (customer_id),ORDER BY NoOfOrd

15. 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, firstName +' '+lastName as employeeName from Employees

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

Ans. Select c.customer_id,o.orderNumber, (ord.quantityOrdered × ord.priceEach) as TotalAmount from customers inner join products p inner join orderDetails ord on c.customer_id=o.customer_id and o.orderNumber=ord.orderNumber and ord.productcode=p.productcode