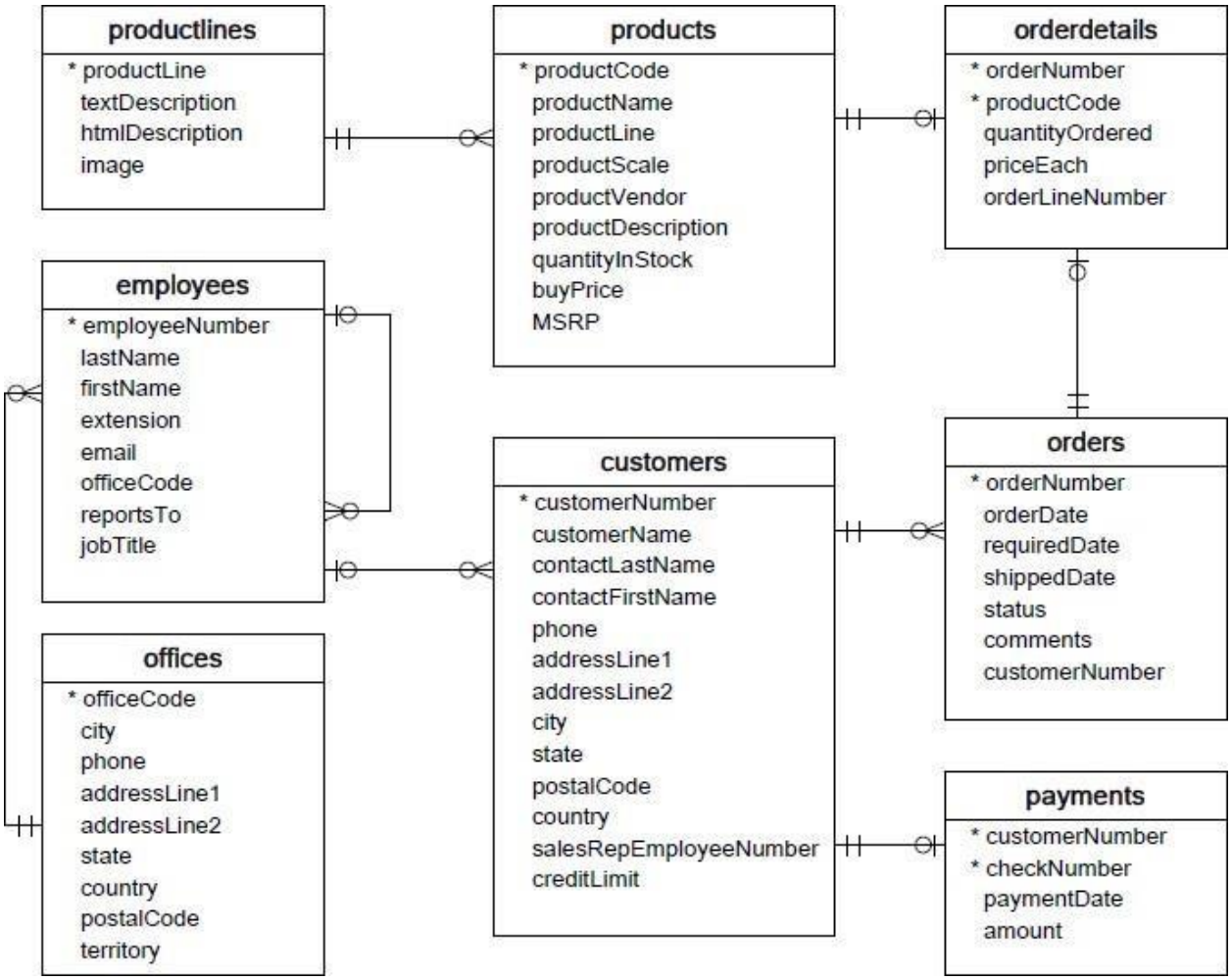
WORKSHEET 4 SQL

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.
- **Product Lines**: stores a list of product line categories.
- **Orders**: stores sales orders placed by customers.
- **Order Details**: 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.

QUESTIONS:

1. Write a SQL query to show average number of orders shipped in a day (use Orders table).

   Answer-

```
sql_command = """SELECT date(shippeddate), AVG(QuantityOrdered) AS
num_orders
FROM Orders, OrderDetails
WHERE OrderDetails.orderNo = Orders.orderNo
GROUP BY date(shippeddate);"""
select= cursor.execute(sql_command)
for i in select:
 print(i)
```

2. Write a SQL query to show average number of orders placed in a day.

Answer-

```
sql_command = """SELECT date(orderdate), AVG(QuantityOrdered)
FROM Orders, OrderDetails
WHERE OrderDetails.orderNo = Orders.orderNo
GROUP BY date(orderdate);"""
select= cursor.execute(sql_command)
for i in select:
 print(i)
```

3. Write a SQL query to show the product name with minimum MSRP (use Products table).

Answer-

```
sql_command = """SELECT ProductName, MIN(MSRP) FROM Products GROUP
BY MSRP;"""
select= cursor.execute(sql_command)
for i in select:
 print(i)
```


4. Write a SQL query to show the product name with maximum value of stockQuantity.

Answer-

```
sql_command = """SELECT ProductName, MAX(QuantityInStock) FROM
Products GROUP BY QuantityInStock;"""
select= cursor.execute(sql_command)
for i in select:
 print(i)
```

5. Write a query to show the most ordered product Name (the product with maximum number of orders).

Answer-

```
sql_command = """SELECT Products.ProductName,
SUM(OrderDetails.QuantityOrdered)
```

```
FROM OrderDetails
INNER JOIN Products
ON Products.ProductCode= OrderDetails.ProductCode
GROUP BY OrderDetails.QuantityOrdered
ORDER BY SUM(OrderDetails.QuantityOrdered) DESC;"""
select= cursor.execute(sql_command)
for i in select:
 print(i)
```

6. Write a SQL query to show the highest paying customer Name.

Answer-

```
sql_command = """SELECT CustomerName , MAX(Amount) AS Amount
FROM Customers, Payment
WHERE Customers.CustomerNo= Payment.CustomerNo
GROUP BY CustomerName
ORDER BY MAX(Amount) DESC;"""
select= cursor.execute(sql_command)
for i in select:
 print(i)
```

7. Write a SQL query to show cutomerNumber, customerName of all the customers who are from Melbourne city.

Answer-

```
sql_command = """SELECT CustomerNo, CustomerName FROM Customers
WHERE City = "Melbourne";"""
select= cursor.execute(sql_command)
for i in select:
 print(i)
```

8. Write a SQL query to show name of all the customers whose name start with “N”.

Answer:

```
sql_command = """SELECT CustomerName FROM Customers
WHERE CustomerName LIKE "N%";"""
select= cursor.execute(sql_command)
for i in select:
 print(i)
```

9. Write a SQL query to show name of all the customers whose phone start with ‘7’ and are from city ‘Las Vegas’.

Answer-

```
sql_command = """SELECT CustomerName, Phone, City FROM Customers
WHERE Phone LIKE "7%" and City = "Las Vegas";"""
select= cursor.execute(sql_command)
for i in select:
 print(i)
```

10. Write a SQL query to show name of all the customers whose creditLimit < 1000 and city is either “Las Vegas” or ”Nantes” or “Stavern”.

Answer-

```
sql_command = """SELECT CustomerName, CreditLimit, City FROM Customers
WHERE CreditLimit < 1000 AND City ="Las Vegas" OR City ="Nantes" OR City =
"Stavern";"""
select= cursor.execute(sql_command)
for i in select:
 print(i)
```

11. Write a SQL query to show all the orderNumber in which quantity ordered <**10**

Answer-

```
sql_command = """SELECT orderNo, QuantityOrdered FROM OrderDetails
WHERE QuantityOrdered < 10;"""
select= cursor.execute(sql_command)
for i in select:
 print(i)
```

12. Write a SQL query to show all the orderNumber whose customer Name start with letter 'N'.

Answer-

```
sql_command = """SELECT Orders.orderNo, Customers.CustomerName FROM
Orders, Customers
ON Orders.CustomerNo =Customers.CustomerNo
WHERE Customers.CustomerName LIKE "N%" ;"""
select= cursor.execute(sql_command)
for i in select:
 print(i)
```

13. Write a SQL query to show all the customerName whose orders are "Disputed" in status.

Answer-

```
sql_command = """SELECT CustomerName, status
FROM Customers, Orders
ON Orders.CustomerNo =Customers.CustomerNo
WHERE status= "Disputed";"""
select= cursor.execute(sql_command)
for i in select:
 print(i)
```

14. Write a SQL query to show the customerName who made payment through cheque with checkNumber starting with H and made payment on "2004-10-19".

Answer-

```
sql_command = """SELECT CustomerName, ChequeNo, PaymentDate
FROM Customers
INNER JOIN Payment
ON Customers.CustomerNo = Payment.CustomerNo
WHERE Payment.ChequeNo LIKE "H%" AND Payment.PaymentDate= "2004-10-
19";"""
select= cursor.execute(sql_command)
for i in select:
 print(i)
```

15. Write a SQL query to show all the checkNumber whose amount > 1000

Answer-

```
sql_command = """SELECT ChequeNo, Amount FROM Payment
WHERE Amount>1000;"""
```

```
select= cursor.execute(sql_command)
for i in select:
 print(i)
```