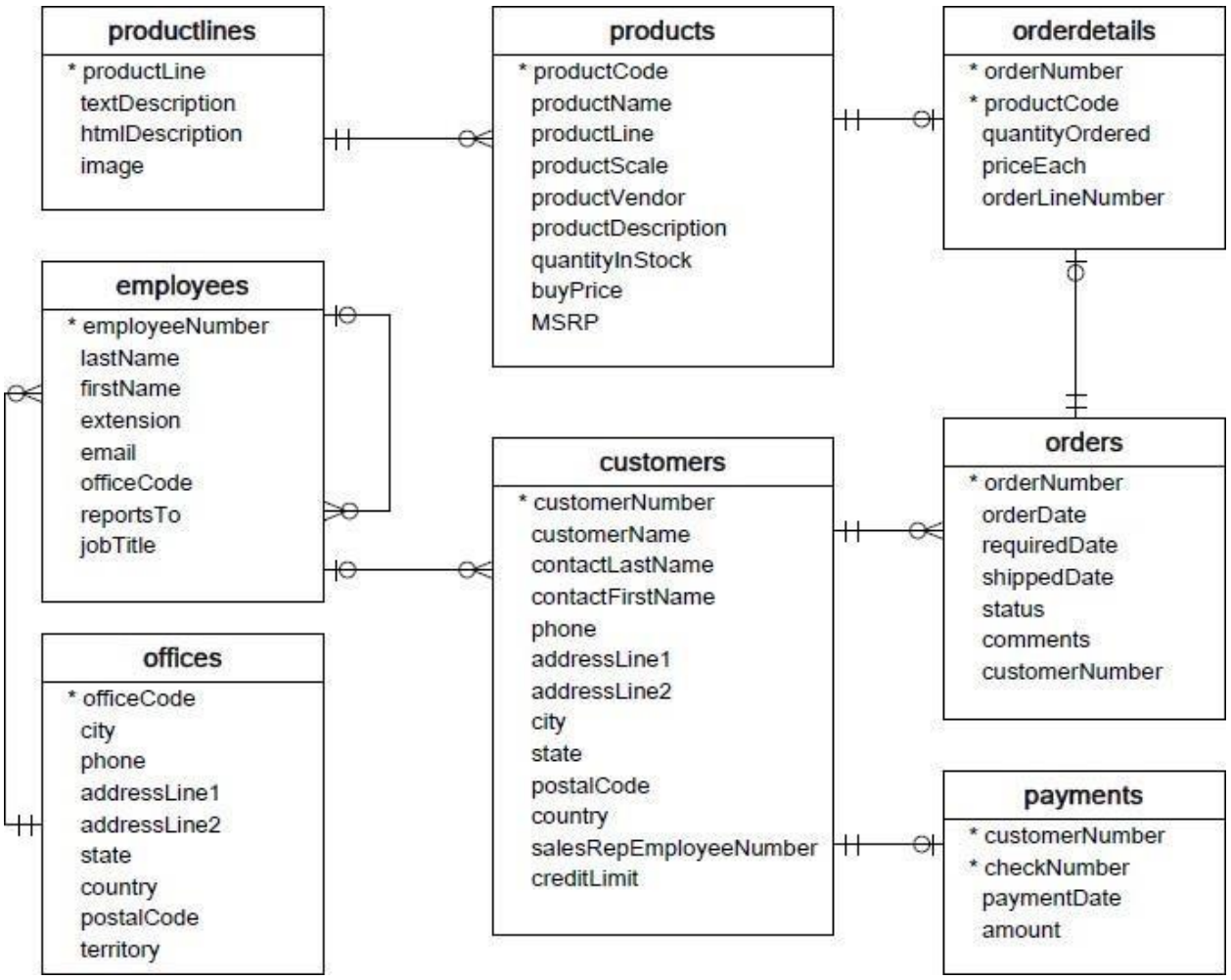
WORKSHEET 4 SQL

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 towhom.
- **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 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)
```

3. 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
```

4. 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)
```

5. 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)
```

6. 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)
```

7. 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)
```

8. Write a SQL query to show name of all the customers whose phone start with ‘7’ and are from city ‘LasVegas’.
   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)
```

9. 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)
```

10. 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)
```

11. 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)
```

12. 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)
```

13. 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)
```

14. 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)
```