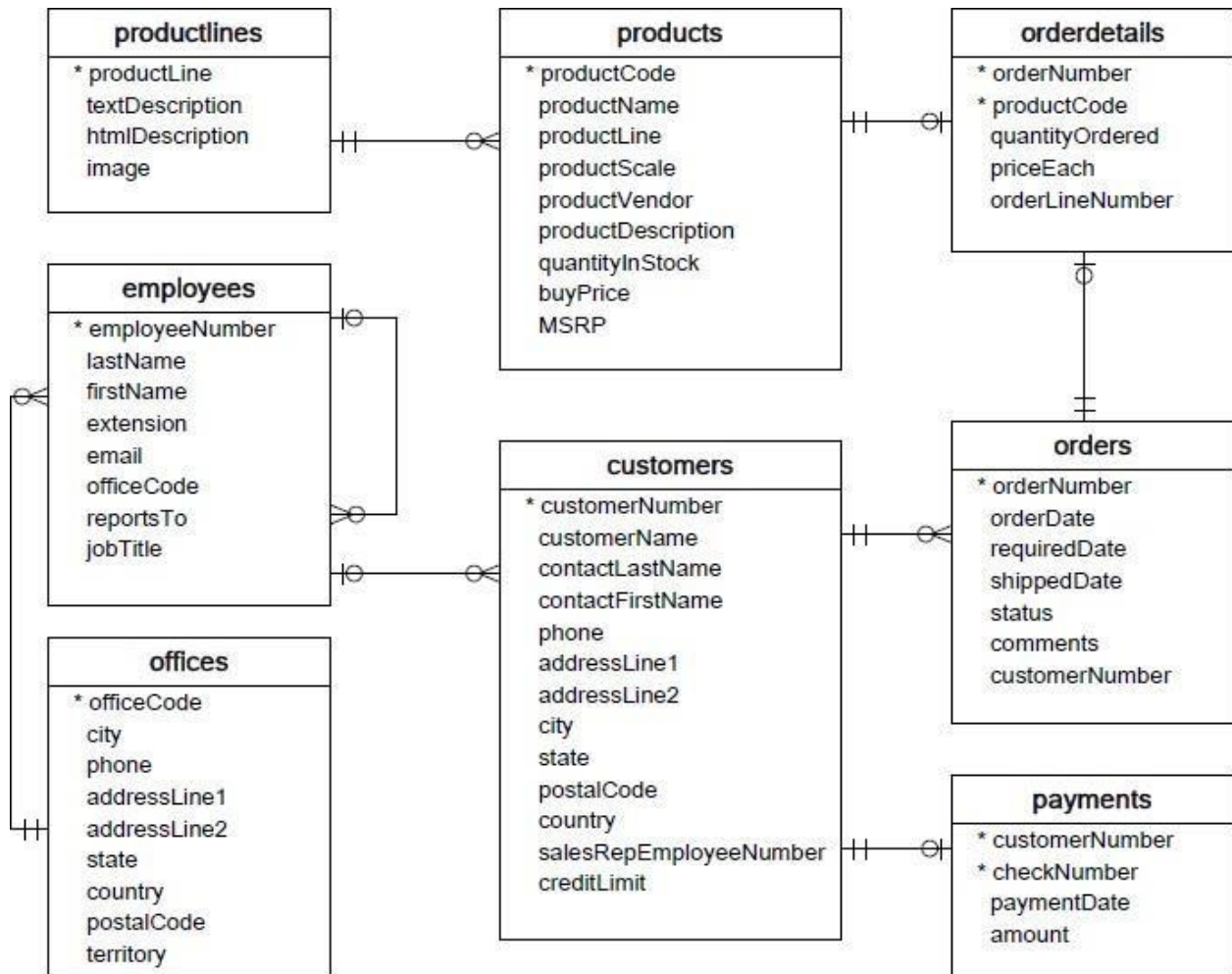# WORKSHEET 4 SQL

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 -

   SELECT AVG(orderNumber), shippedDate FROM orders GROUP BY shippedDate;

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

    Answer -

    SELECT AVG(orderNumber), orderDate FROM orders GROUP BY orderDate;

3. Write a SQL query to show the product name with minimum MSRP (use Products table).
    Answer -
    SELECT productName, MIN(MSRP) FROM products;

4. Write a SQL query to show the product name with maximum value of stockQuantity.
   Answer -
   SELECT productName, MAX(quantityInStock) FROM products;

5. Write a query to show the most ordered product Name (the product with maximum number of orders).
   Answer –
   SELECT p.productName from products p, orderDetails od WHERE p.productCode = od.productCode AND od.quantityordered = (SELECT MAX(quantityordered) FROM orderDetails);

6. Write a SQL query to show the highest paying customer Name.
   Answer –
   SELECT c.customerName from customer c, payments p WHERE c.customerNumber = p.customerNumber AND p.amount = (SELECT MAX(amount) FROM payments);

7. Write a SQL query to show customerNumber, customerName of all the customers who are fromMelbourne city.
   Answer -
   SELECT customerNumber, customerName FROM Customers WHERE city = 'Melbourne';

8. Write a SQL query to show name of all the customers whose name start with "N".
   Answer -
   SELECT customerName FROM Customers WHERE customerName LIKE 'N%';

9. Write a SQL query to show name of all the customers whose phone start with '7' and are from city 'LasVegas'.
   Answer –
   SELECT customerName FROM Customers WHERE phone LIKE '7%' AND city = 'LasVegas';

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 -
    SELECT customerName FROM Customers WHERE creditLimit < 1000 AND city IN('LasVegas','Nantes','Stavern');;

11. Write a SQL query to show all the orderNumber in which quantity ordered <10.
    Answer –
    SELECT orderNumber FROM orderdetails WHERE quantityordered < 10;

12. Write a SQL query to show all the orderNumber whose customer Name start with letter 'N'.
    Answer –
    SELECT orderNumber.orders FROM orders INNER JOIN Customers ON orders. customerNumber = Customers.customerNumber WHERE Customers.customerName LIKE 'N%';

13. Write a SQL query to show all the customerName whose orders are "Disputed" in status.
    Answer –
    SELECT customerName.Customers FROM orders INNER JOIN Customers ON orders. customerNumber = Customers.customerNumber WHERE orders .status = 'Disputed';

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".
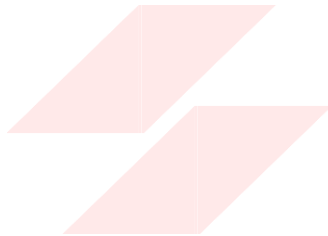   Answer -
    SELECT customerName.Customers FROM payments INNER JOIN Customers ON payments. customerNumber = Customers.customerNumber WHERE checkNumber LIKE '%H' AND paymentDate = '2004-10-19';

15. Write a SQL query to show all the checkNumber whose amount > 1000.
    Answer –
    SELECT checkNumber FROM payments WHERE amount >1000;