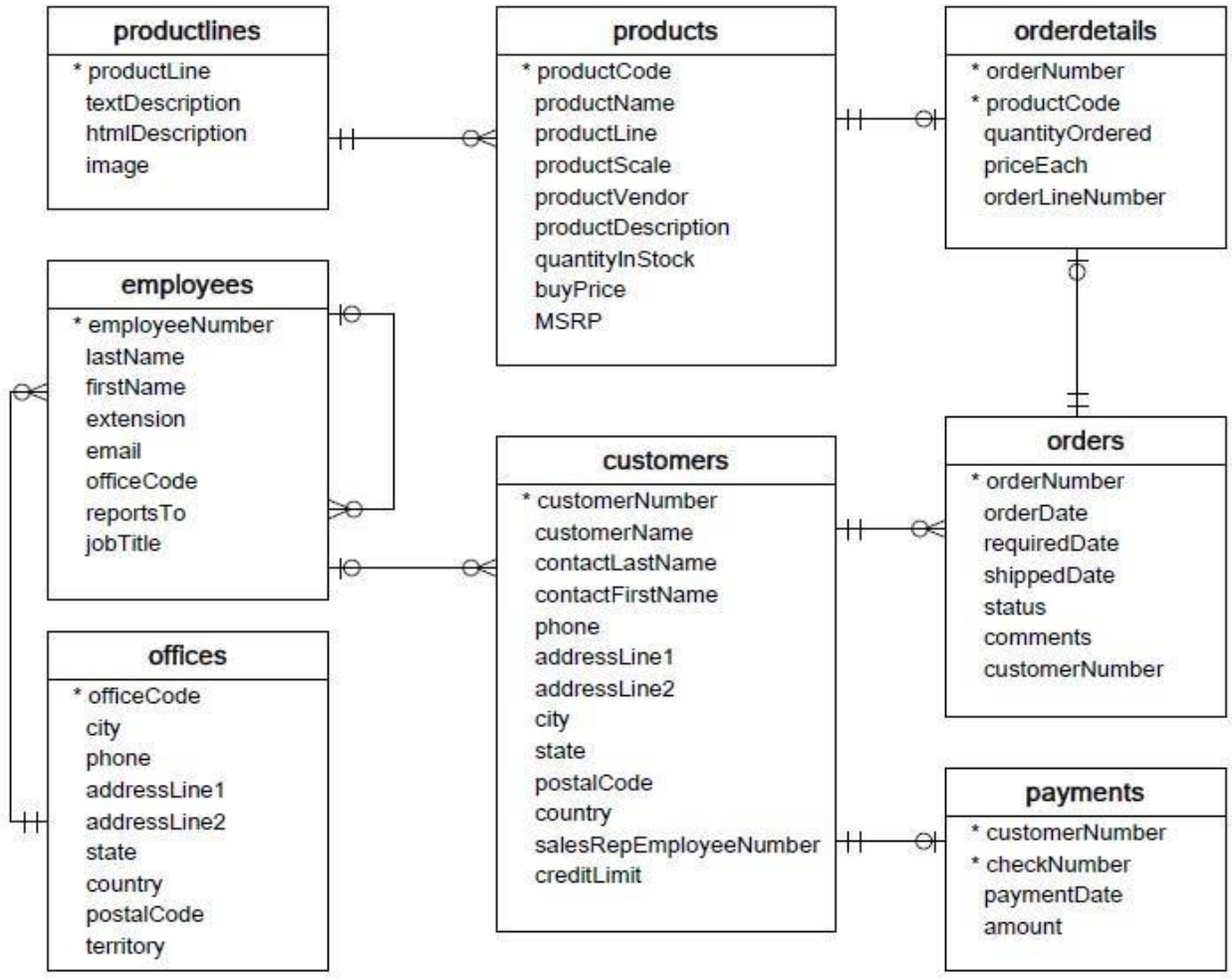
WORKSHEET 3 SQL

Refer the following ERD and answer all the questions in this worksheet. You have to write the queries using mysql for the required Operation.



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- **Offices**: stores sales office data.

1. Write SQL query to create table **Customers.**
2. Write SQL query to create table **Orders.**
3. Write SQL query to show all the columns data from the **Orders** Table.
4. Write SQL query to show all the comments from the **Orders** Table.
5. Write a SQL query to show orderDate and Total number of orders placed on that date, from **Orders** table.
6. Write a SQL query to show employeeNumber, lastName, firstName of all the employees from **employees** table.
7. Write a SQL query to show all orderNumber, customerName of the person who placed the respective order.
8. Write a SQL query to show name of all the customers in one column and salerep employee name in anothercolumn.

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.
10. Write a SQL query to show all the products productName, MSRP, productDescription from the **products** table.
11. Write a SQL query to print the productName, productDescription of the most ordered product.
12. Write a SQL query to print the city name where maximum number of orders were placed.
13. Write a SQL query to get the name of the state having maximum number of customers.
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.
15. Write a SQL query to print the orderNumber, customer Name and total amount paid by the customer for that order (quantityOrdered × priceEach).

Answer :-

1.

```
mysql> CREATE TABLE Customers (
    -> CustomerNumber int NOT NULL,
    -> customerName varchar(255),
    -> contactLastName varchar(255),
    -> contactFirstName varchar(255),
    -> Phone int,
    -> addressLine1 varchar(255),
    -> addressLine2 varchar(255),
    -> city varchar(255),
    -> state varchar(255),
    -> postalcode int,
    -> country varchar(255),
    -> SalesRepEmployeeNumber int,
    -> creditLimit int,
    -> PRIMARY KEY (CustomerNumber),
    -> FOREIGN KEY (SalesRepEmployeeNumber) REFERENCES employees(employeeNumber)
    -> );
```

2.

```
mysql> CREATE TABLE Orders (
    -> orderNumber int NOT NULL,
    -> orderDate date,
    -> requiredDate date,
    ->  shippedDate date,
    -> status varchar(255),
    -> comments varchar(255),
    -> customerNumber int,
    -> PRIMARY KEY(orderNumber),
    -> FOREIGN KEY (CustomerNumber) REFERENCES Customers(CustomerNumber)
    -> );
```

3.

```
mysql> select * from Orders;
```

4.

```
mysql> select comments from orders;
```

5.

```
mysql> SELECT orderDate, count(OrderNumber) as TOTAL_NUMBER_OF_ORDERS FROM Orders
GROUP BY orderDate;
6.
mysql> SELECT EmployeeNumber, LastName, FirstName from employees;
7.
mysql> select a.orderNumber, b.customerName from Orders a, Customers b where
a.customerNumber=b.CustomerNumber;
8.
mysql> SELECT b.customerName as Customer_Name,
RTRIM(LTRIM(CONCAT(COALESCE(a.lastName + ' ', ''), COALESCE(a.firstName + ' ',
'')))) AS Sales_Rep_Employee_Name FROM employees a, Customers b where
a.employeeNumber=b.SalesRepEmployeeNumber;

9.
mysql> select paymentDate as Date, sum(amount) from payments GROUP BY paymentDate;
10.
mysql> select productName, MSRP, productDescription from products;
11.
mysql> SELECT p.productName, p.productDescription FROM orderdetails AS o INNER JOIN
products AS p ON o.productCode = p.productCode GROUP BY o.productCode ORDER BY
SUM(o.quantityOdered) DESC, p.productName ASC
12.
mysql> select a.city, count(b.orderNumber) as NUMBER_OF_ORDERS from Customers a,
Orders b where a.customerNumber = b.customerNumber GROUP BY a.city ORDER BY
NUMBER_OF_ORDERS DESC;
13.
mysql> select state, count(customerNumber) as NUMBER_OF_Customers from Customers
GROUP BY state ORDER BY NUMBER_OF_Customers DESC;
14.
mysql> SELECT employeeNumber, RTRIM(LTRIM(CONCAT(COALESCE(lastName + ' ', ''),
COALESCE(firstName + ' ', '')))) AS Employee_Full_Name FROM employees;
15.
mysql> select c.orderNumber as ORDER_NUMBER, b.customerName as Customer_Name,
c.quantity_ordered*c.priceEach as Total_Amount_Paid from Orders a INNER JOIN
Custormers b ON a.customerNumber=b.CustomerNumber INNER JOIN orderdetails c ON
a.orderNumber = c.orderNumber GROUP BY c.orderNumber;
```