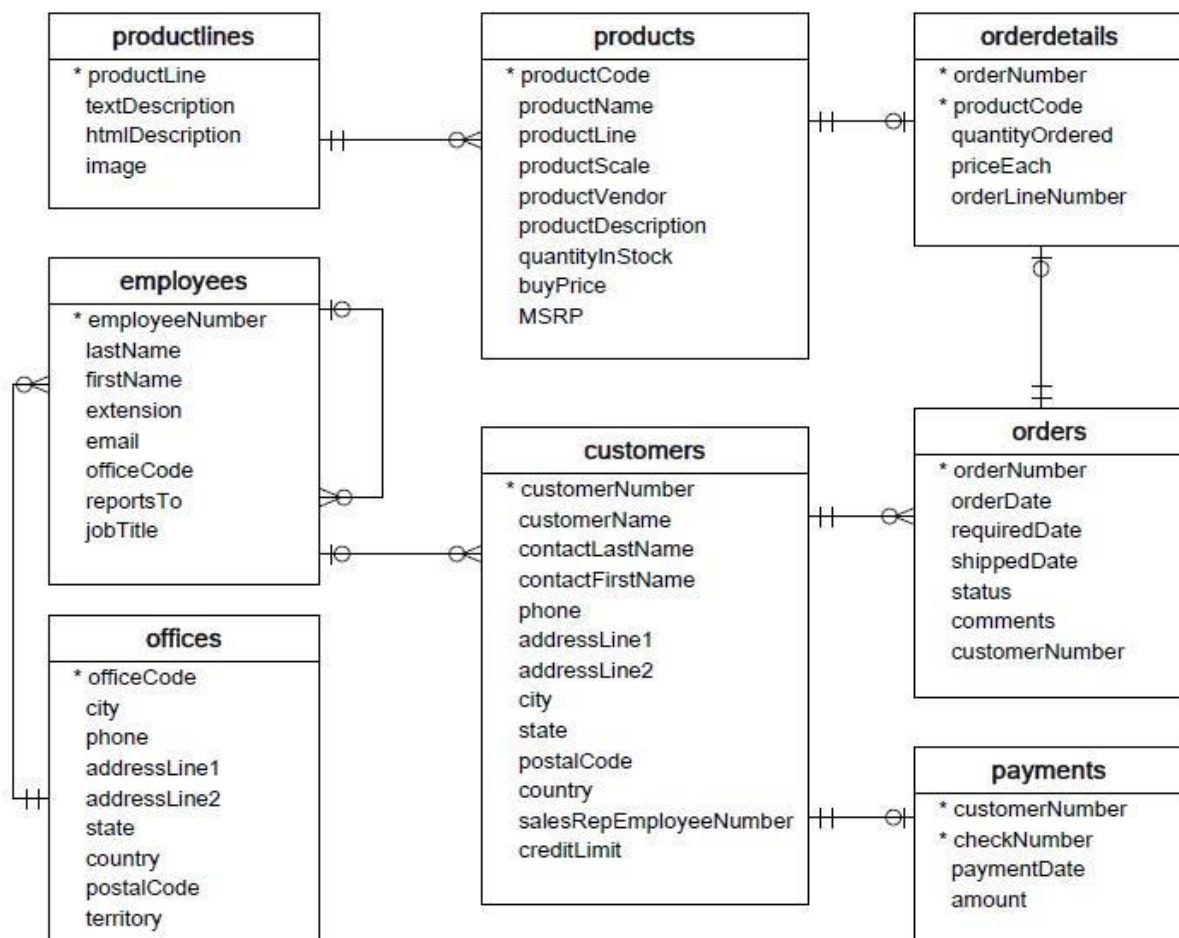


WORKSHEET 3 SQL

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.

```
create table Customers(customerNumber int Primary Key,  
customerName varchar(20),  
contactLastName varchar(20),  
contactFirstName varchar(20),  
Phone int,  
addressLine1 varchar(20),  
addressLine2 varchar(20),  
city varchar(20),  
state varchar(20),  
postalCode int,  
country varchar(20),  
salesRepEmployeeNumber int,  
creditLimit float);
```

```
mysql> create table Customers(customerNumber int Primary Key,  
-> customerName varchar(20),  
-> contactLastName varchar(20),  
-> contactFirstName varchar(20),  
-> Phone int,  
-> addressLine1 varchar(20),  
-> addressLine2 varchar(20),  
-> city varchar(20),  
-> state varchar(20),  
-> postalCode int,  
-> country varchar(20),  
-> salesRepEmployeeNumber int,  
-> creditLimit float);  
Query OK, 0 rows affected (1.80 sec)
```

2. Write SQL query to create table Orders.

```
create table Orders(orderNumber int Primary Key,  
orderDate date,  
requiredDate date,  
shippedData date,  
status varchar(20),  
comments varchar(40),  
customerNumber int);
```

```
mysql> create table Orders(orderNumber int Primary Key,  
-> orderDate date,  
-> requiredDate date,  
-> shippedData date,  
-> status varchar(20),  
-> comments varchar(40),  
-> customerNumber int);  
Query OK, 0 rows affected (0.60 sec)
```

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

```
select * from Orders;
```

```
mysql> select * from Orders;  
+-----+-----+-----+-----+-----+-----+-----+  
| orderNumber | orderDate | requiredDate | shippedData | status | comments | customerNumber |  
+-----+-----+-----+-----+-----+-----+-----+  
| 101 | 2010-05-20 | 2015-05-20 | 2013-05-20 | In Progress | Product Delivery will be soon | 101010 |  
| 102 | 2020-10-20 | 2025-10-20 | 2023-10-20 | Delivered | Product has been delivered | 101110 |  
| 103 | 2013-11-20 | 2016-11-20 | 2014-11-20 | In Progress | Product Delivery will be soon | 101234 |  
| 104 | 2015-07-20 | 2020-07-20 | 2017-07-20 | On the Way | Product will deliver today | 103452 |  
| 105 | 2011-03-20 | 2015-03-20 | 2012-03-20 | Delivered | Product has been delivered | 142342 |  
+-----+-----+-----+-----+-----+-----+-----+  
5 rows in set (0.00 sec)
```

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

Select comments from Orders;

```
mysql> select comments from Orders;
+-----+
| comments |
+-----+
| Product Delivery will be soon |
| Product has been delivered |
| Product Delivery will be soon |
| Product will deliver today |
| Product has been delivered |
+-----+
5 rows in set (0.03 sec)
```

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

Select orderDate, count(orderNumber) from Orders group by orderDate;

```
mysql> select OrderDate, count(OrderNumber) from Orders group by OrderDate;
+-----+-----+
| OrderDate | count(OrderNumber) |
+-----+-----+
| 2010-05-20 | 1 |
| 2020-10-20 | 1 |
| 2013-11-20 | 1 |
| 2015-07-20 | 1 |
| 2011-03-20 | 1 |
+-----+-----+
5 rows in set (0.07 sec)
```

6. Write a SQL query to show employeeNumber, lastName, firstName of all the employees from employees table.

select employeeNumber, lastName, firstName from Employees;

```
mysql> select employeeNumber, lastName, firstName from Employees;
+-----+-----+-----+
| employeeNumber | lastName | firstName |
+-----+-----+-----+
| 1000 | Anderson | Jennifer |
| 1001 | Andrews | John |
| 1002 | Corkins | David |
| 1003 | Matthews | Andrew |
| 1004 | Suzanne | Andrade |
+-----+-----+-----+
5 rows in set (0.00 sec)
```

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

select orderNumber, customerName from Orders, Customers where Orders.customerNumber=Customers.customerNumber;

```
mysql> select orderNumber, customerName from Orders, Customers where Orders.customerNumber=Customers.customerNumber;
+-----+-----+
| orderNumber | customerName |
+-----+-----+
| 101 | Mandela |
| 102 | Samuel Matt |
| 103 | Kristoffer |
| 104 | Jennifer Hamm |
| 105 | Christian Roain |
+-----+-----+
5 rows in set (0.06 sec)
```

- 8. Write a SQL query to show name of all the customers in one column and salerepemployee name in another column.**

select customerName, salesRepEmployeeNumber from Customers;

```
mysql> select customerName, salesRepEmployeeNumber from Customers;
+-----+-----+
| customerName | salesRepEmployeeNumber |
+-----+-----+
| Mandela | 100 |
| Samuel Matt | 101 |
| Kristoffer | 102 |
| Jennifer Hamm | 103 |
| Christian Roain | 104 |
+-----+-----+
5 rows in set (0.00 sec)
```

- 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.**

select paymentDate, sum(amount) as TotalPayment from Payments group by paymentDate;

```
mysql> select paymentDate, sum(amount) as TotalPayment from Payments group by paymentDate;
+-----+-----+
| paymentDate | TotalPayment |
+-----+-----+
| 2022-05-20  |      1000000 |
| 2028-08-20  |      5000000 |
| 2009-08-20  |        30000 |
| 2010-08-20  |       200000 |
| 2013-04-20  |        50000 |
| 2022-03-20  |      1500000 |
+-----+-----+
6 rows in set (0.06 sec)
```

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

select productName, MSRP, productDescription from products;

```
mysql> select productName, MSRP, productDescription from products;
+-----+-----+-----+
| productName | MSRP | productDescription |
+-----+-----+-----+
| Sunscreen  |   100 | Protect Ultra Violet Rays |
| Sunsilk    |   40  | Silky and Shining Hairs  |
| Dark Chocolate |   95  | Tasty Chocolate          |
| Badam      |  110  | Health and Boost Immune  |
| Books      |   100 | All variety books        |
| Laptop     | 450000 | Speed and longlasting    |
+-----+-----+-----+
6 rows in set (0.06 sec)
```

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

select productName, productDescription from products group by
productName order by count(productName) desc limit 2;

```
mysql> select productName, productDescription from products group by productName order by count(productName) desc limit 2;
```

productName	productDescription
Badam	Health and Boost Immune
Dark Chocolate	Tasty Chocolate

```
2 rows in set (0.00 sec)
```

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

select city from Customers inner join Orders on
customers.customerNumber=orders.customerNumber group by
city order by city desc limit 1;

```
mysql> select city from Customers inner join Orders on
-> customers.customerNumber=orders.customerNumber group by city
-> order by city desc limit 1;
```

city
Venice

```
1 row in set (0.00 sec)
```

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

Select state from Customers group by state
Order by count(customerName) desc limit 1;

```
mysql> select state from Customers group by state
-> order by count(customerName) desc limit 1;
```

state
Tokyo

```
1 row in set (0.00 sec)
```

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.

select employeeNumber, concat(firstName, ' ', lastName) as fullName from Employees;

```
mysql> select employeeNumber, concat(firstName, ' ', lastName) as fullName from Employees;
+-----+-----+
| employeeNumber | fullName          |
+-----+-----+
| 1000           | Jennifer Anderson |
| 1001           | John Andrews      |
| 1002           | David Corkins      |
| 1003           | Andrew Matthews   |
| 1004           | Andrade Suzanne   |
+-----+-----+
5 rows in set (0.00 sec)
```

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

```
select orders.orderNumber, customers.customerName,
       orderdetails.quantityOrdered*orderdetails.priceEach as totalamount
from ((orders inner join customers on
orders.customerNumber=customers.customerNumber)
inner join orderdetails on orders.orderNumber=orderdetails.orderNumber)
```