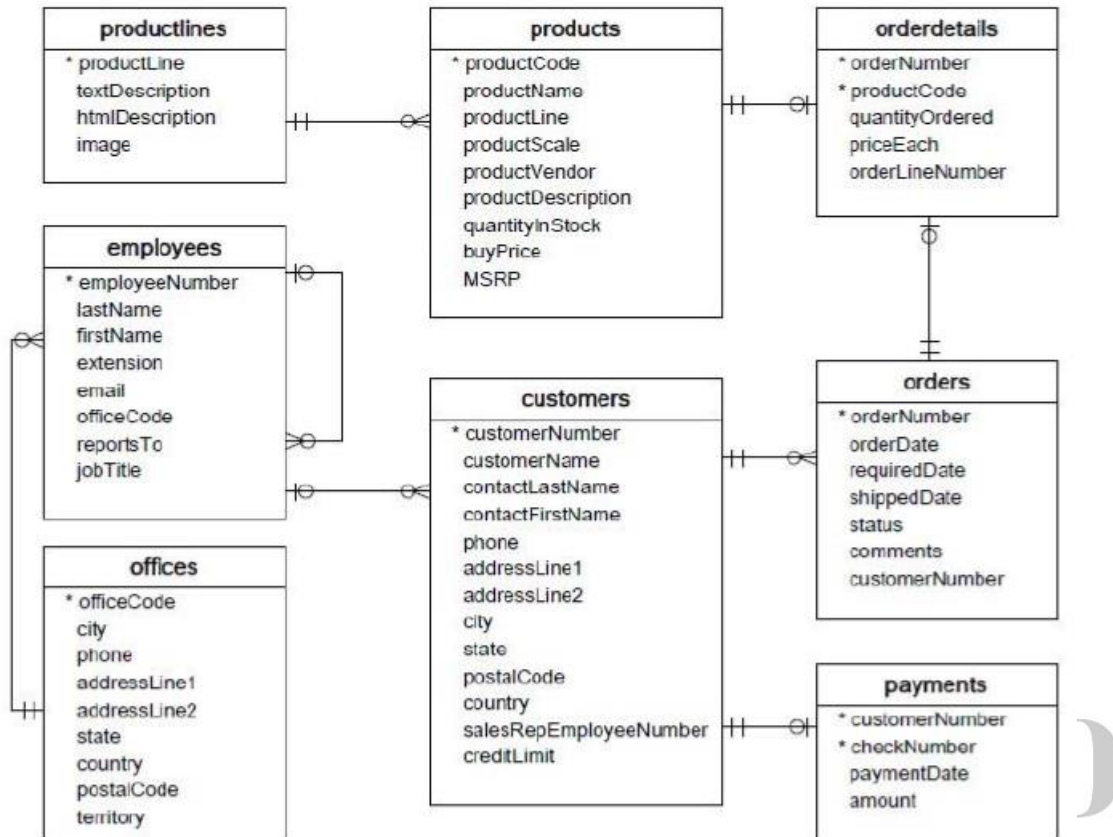# Worksheet 3 SQL

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

1. Write SQL query to create table Customers.

```
CREATE TABLE customers (
    customerNumber int NOT NULL PRIMARY KEY,
    customerName varchar(255),
    contactLastName varchar(255),
    contactFirstName varchar(255),
    phone int,
    addressLine1 varchar(255),
    addressLine2 varchar(255),
    city varchar(50),
    state varchar(50),
    postalCode int,
    country varchar(50),
    salesRepEmployeeNumber int,
    creditLimit float);
```

2. Write SQL query to create table Orders.

```
CREATE TABLE orders (
customerNumber int,
orderNumber int NOT NULL,
orderDate date,
requiredDate date,
shippedDate date,
status varchar(255),
comments varchar(255),
PRIMARY KEY (orderNumber),
FOREIGN KEY (customerNumber) REFERENCES
customers(customerNumber))
```

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

```
SELECT * FROM orders
```

orderNumber	orderDate	requiredDate	shippedDate	status	comments	customerNumber
10100	06-01-03	13-01-03	10-01-03	Shipped	NULL	363
10101	09-01-03	18-01-03	11-01-03	Shipped	Check	128
10102	10-01-03	18-01-03	14-01-03	Shipped	NULL	181
10103	29-01-03	07-02-03	02-02-03	Shipped	NULL	121
10104	31-01-03	09-02-03	01-02-03	Shipped	NULL	141

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

```
SELECT DISTINCT comments FROM orders
-- or
SELECT comments FROM orders
```

comments
Null
Check on availability.
Difficult to negotiate with customer. We need more marketing materials
Customer requested that FedEx Ground is used for this shipping
Customer requested that ad materials (such as posters, pamphlets) be included in the shippment

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

```
SELECT DISTINCT orderDate, COUNT(orderNumber)
FROM orders
group by orderDate
```

orderDate	COUNT(orderNumber)
2004-11-24	4
2003-11-05	3
2003-11-06	3

2003-11-14	3

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

    SELECT employeeNumber, lastName, firstName

    FROM employees

employeeNumber	lastName	firstName
1002	Murphy	Diane
1056	Patterson	Mary
1076	Firrelli	Jeff
1088	Patterson	William

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

    SELECT o.orderNumber, c.customerName

    FROM orders o

    JOIN customers c

    ON o.customerNumber = c.customerNumber

orderNumber	customerName
10278	Signal Gift Stores
10346	Signal Gift Stores
10120	Australian Collectors, Co.
10125	Australian Collectors, Co.

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

    SELECT c.customerName, s.firstName, s. lastName

    FROM customers c

    JOIN employees s

    ON c.salesRepEmployeeNumber = s.employeeNumber

customerName	firstName	lastName
Mini Gifts Distributors Ltd.	Leslie	Jennings
Mini Wheels Co.	Leslie	Jennings
Technics Stores Inc.	Leslie	Jennings
Corporate Gift Ideas Co.	Leslie	Jennings

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), COUNT(customerNumber) As Customers

    FROM payments

    GROUP BY paymentDate

paymentDate	amount	Customers
2003-12-09	117002.59	3
2003-11-18	106177.78	3
2004-06-21	86221.60	3
2003-11-24	121700.49	3

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

    SELECT productName, MSRP, productDescription

    FROM products

productName	MSRP	productDescription
1969 Harley Davidson Ultimate Chopper	95.70	This replica features working kickstand, front suspension, gear-shift lever, footbrake lever, drive chain, wheels and steering. All parts are particularly delicate due to their precise scale and require special care and attention.
1952 Alpine Renault 1300	214.30	Turnable front wheels; steering function; detailed interior; detailed engine; opening hood; opening trunk; opening doors; and detailed chassis.
1996 Moto Guzzi 1100i	118.94	Official Moto Guzzi logos and insignias, saddle bags located on side of motorcycle, detailed engine, working steering, working suspension, two leather seats, luggage rack, dual exhaust pipes, small saddle bag located on handle bars, two-tone paint with c...

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

    SELECT p.productName, o.productCode, COUNT(o.productCode) AS products

    FROM orderdetails o

    JOIN products p

    ON p.productCode = o.productCode

    GROUP BY productCode

paymentDate	productCode	products
1969 Harley Davidson Ultimate Chopper	S10_1678	28
1952 Alpine Renault 1300	S10_1949	28
1996 Moto Guzzi 1100i	S10_2016	28
2003 Harley-Davidson Eagle Drag Bike	S10_4698	28

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

```
SELECT c.city, COUNT(o.orderNumber) AS City_Orders
FROM orders o
JOIN customers c
ON c.customerNumber = o.customerNumber
GROUP BY c.city
```

city	City_Orders
Nantes	7
Las Vegas	3
Melbourne	5
Stavern	4

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

```
SELECT state, COUNT(customerNumber)
FROM customers
GROUP BY state
```

state	City_Orders
	73
NV	1
Victoria	2
CA	11

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 NAME
FROM employees
```

employeeNumber	NAME
1002	Diane Murphy
1056	Mary Patterson
1076	Jeff Firrelli
1088	William Patterson

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

```
SELECT o.orderNumber, c.customerName,
quantityOrdered*o.priceEach AS "Final_Price"
FROM orderdetails o
JOIN orders ord
ON o.orderNumber = ord.orderNumber
```

```
JOIN customers c
ON ord.customerNumber = c.customerNumber
```

orderNumber	customerName	Final_Price
10407	The Sharp Gifts Warehouse	546.66
10425	La Rochelle Gifts	553.52
10344	Marseille Mini Autos	557.60
10110	AV Stores, Co.	577.60

```
JOIN customers c
ON ord.customerNumber = c.customerNumber
```