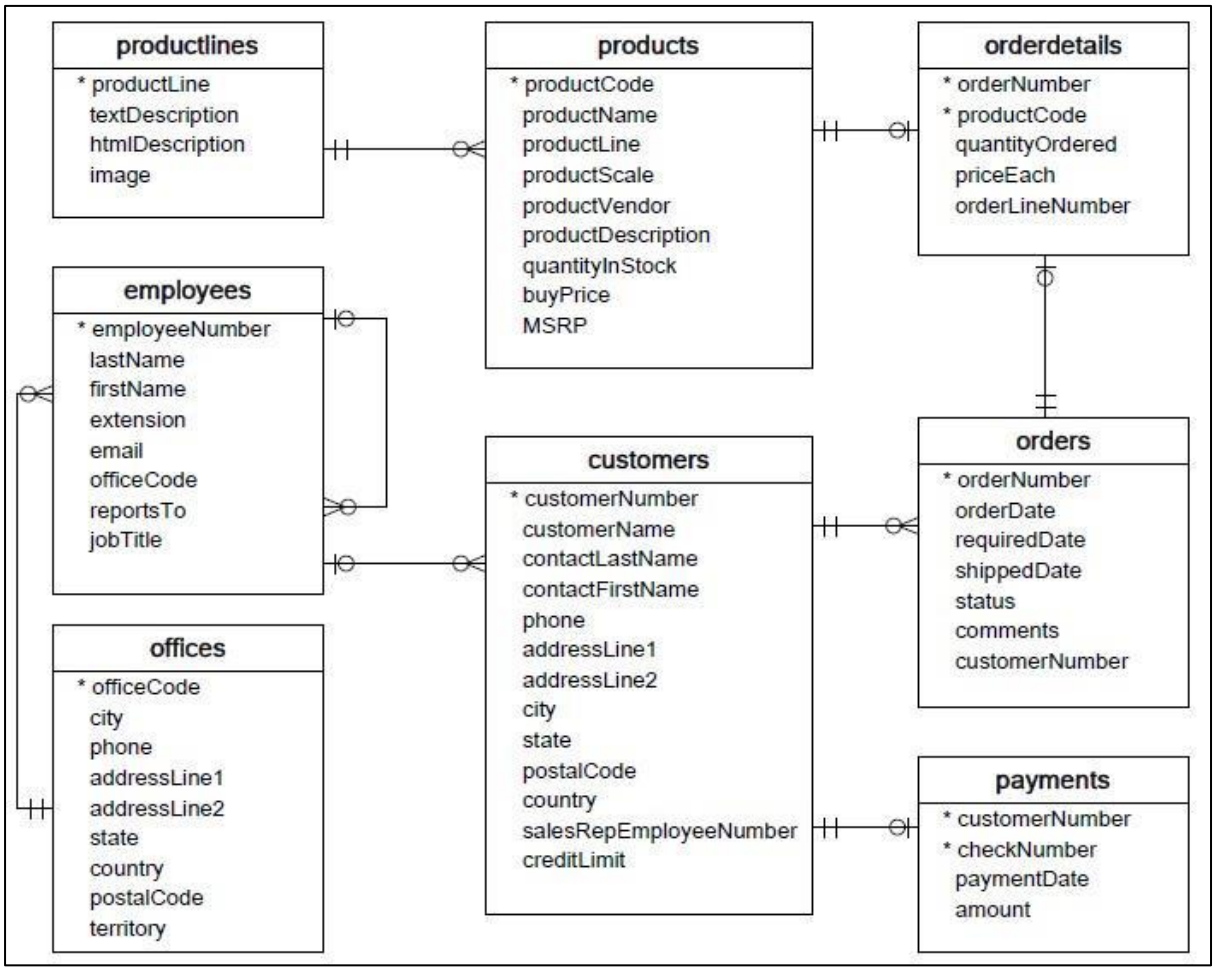
Worksheet-Set 3: Statistics Assignment

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.**

Q1. Write SQL query to create table Customers.

```
CREATE TABLE Customers (
  customerNumber INTEGER PRIMARY KEY,
  customerName VARCHAR(255),
  contactLastName VARCHAR(255),
  contactFirstName VARCHAR(255),
  phone VARCHAR(255),
```

```
  addressLine1 VARCHAR(255),
  addressLine2 VARCHAR(255),
  city VARCHAR(255),
  state VARCHAR(255),
  postalCode VARCHAR(255),
  country VARCHAR(255)
  salesRepEmployeeNumber int NOT NULL,
  creditLimit int NOT NULL,
  FOREIGN KEY (salesRepEmployeeNumber) REFERENCES employees (employeeNumber) ON DELETE
CASCADE
);
```

Q2. Write SQL query to create table Orders.

```
CREATE TABLE orders(
   orderNumber int NOT NULL PRIMARY KEY,
   orderDate timestap NOT NULL,
   requiredDate timestamp NOT NULL,
   shippedDate timestamp NOT NULL,
   comments varchar(255) NOT NULL,
   customerNumber int NOT NULL,
   FOREIGN KEY (orderNumber) REFERENCES orderdetails(orderNumber) ON DELETE CASCADE
   FOREIGN KEY (customerName) REFERENCES customers(CustomerName) ON DELETE CASCADE
);
```

Q3. Write SQL query to show all the columns data from the Orders Table.

```
select * from Orders;
```

Q4. Write SQL query to show all the comments from the Orders Table.

```
SELECT comments FROM Orders;
```

Q5. 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;
```

Q6. Write a SQL query to show employeNumber, lastName, firstName of all the employees from employees table.

```
SELECT employeNumber, lastName, firstName FROM employees;
```

Q7. 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
INNER JOIN Customers c ON o.customerNumber = c.customerNumber;
```

Q8. Write a SQL query to show name of all the customers in one column and salerepemployee name in another column.

```
SELECT c.customerName, e.lastName FROM Customers c
INNER JOIN employees e ON c.salesRepEmployeeNumber = e.employeeNumber;
```

Q9. 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) FROM payments
GROUP BY paymentDate;
```

Q10. Write a SQL query to show all the products productName, MSRP, productDescription from the productstable.

```
SELECT productName, MSRP, productDescription FROM products;
```

Q11. Write a SQL query to print the productName, productDescription of the most ordered product.

```
SELECT p.productName, p.productDescription FROM products p
INNER JOIN orderdetails od ON p.productCode = od.productCode
GROUP BY p.productName, p.productDescription
ORDER BY SUM(od.quantityOrdered) DESC
LIMIT 1;
```

Q12. Write a SQL query to print the city name where maximum number of orders were placed.

```
SELECT c.city FROM orders o
INNER JOIN customers c ON o.customerNumber = c.customerNumber
GROUP BY c.city
ORDER BY COUNT(o.orderNumber) DESC
LIMIT 1;
```

Q13. Write a SQL query to get the name of the state having maximum number of customers.

```
SELECT c.state FROM customers c
GROUP BY c.state
ORDER BY COUNT(c.customerNumber) DESC
LIMIT 1;
```

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;
```

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, SUM(od.quantityOrdered * od.priceEach) AS totalAmount
FROM orders o
INNER JOIN customers c ON o.customerNumber = c.customerNumber
INNER JOIN orderdetails od ON o.orderNumber = od.orderNumber
GROUP BY o.orderNumber, c.customerName;
```