# SQL – WORKSHEET 4

## MySQL Sample Database SchemaRefer 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.

**QUESTIONS:**

1. Write SQL query to show average number of orders shipped in a day (use Orders table).

**Answer:** WITH x AS (SELECT shippedDate, COUNT(orderNumber) AS total\_orders FROM Orders) SELECT AVG(total\_orders) AS AverageNumberOfOrdersShipped FROM x;

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

**Answer:** WITH x AS (SELECT orderDate, COUNT(orderNumber) AS total\_orders FROM Orders) SELECT AVG(total\_orders) AS AverageNumberOfOrdersPlaced FROM x;

1. Write SQL query to show the product name with minimum MSRP (use Products table).

**Answer:** SELECT productName FROM Products ORDER BY MSRP LIMIT 1;

1. Write SQL query to show the product name with maximum value of stockQuantity.

**Answer:** SELECT productName FROM Products ORDER BY quantityInStock DESC LIMIT 1;

1. Write a query to show the most ordered product Name (the product with maximum number of orders).

**Answer:** SELECT b.productName FROM OrderDetails AS a INNER JOIN Products AS b ON a.productCode = b.productCode GROUP BY b.productCode ORDER BY COUNT(orderNumber) DESC LIMIT 1;

1. Write a SQL query to show the highest paying customer Name.

**Answer:** WITH x AS (SELECT a.customerName, b.SUM(amount) AS total\_payment FROM Customers AS a INNER JOIN Payments b ON a.customerNumber = b.customerNumber GROUP BY customerName) SELECT customerName, total\_payment FROM x WHERE total\_payment = (SELECT MAX(total\_payment) FROM x);

1. Write a SQL query to show cutomerNumber, customerName of all the customers who are from Melbourne city.

**Answer:** SELECT customerNumber, customerName FROM Customers WHERE city= "Melbourne";

1. Write a SQL query to show name of all the customers whose name start with “N”.

**Answer:** SELECT customerName FROM Customers WHERE customerName REGEXP '^N.\*';

1. Write a SQL query to show name of all the customers whose phone start with ‘^7.\*’ and are from city ‘Las Vegas’.

**Answer:** SELECT customerName FROM Customers WHERE phones REGEXP “^7[0-9]\*” AND city = “Las Vegas”;

1. 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 ("Las Vegas", "Nantes", "Stavern");



1. Write a SQL query to show all the orderNumber in which quantity ordered <10.

**Answer:** SELECT orderNumber FROM orderdetails WHERE quanitityOrdered<10;

1. Write a SQL query to show all the orderNumber whose customer Name start with letter **N.**

**Answer:** SELECT b.orderNumber FROM Customers AS a INNER JOIN orders AS b ON a.customerNumber = b.customerNumber WHERE customerName REGEXP "^N.\*";

1. Write a SQL query to show all the customerName whose orders are “Disputed” in status.

**Answer:** SELECT b.customerName FROM Orders AS a INNER JOIN Customers AS b ON a.customerNumber= b.customerNumber WHERE status= "Disputed";

1. 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 b.customerName FROM Payments AS a INNER JOIN Customers AS b ON a.customerNumber= b.customerNumber WHERE a.paymentDate = "2004-10-19" AND a.checkNumber REGEXP "^H.\*";

1. Write a SQL query to show all the checkNumber whose amount > 1000.

**Answer:** SELECT checkNumber FROM payments WHERE amount >1000;