

## SQL WORKSHEET 3

### FlipRobo

#### **1. Write SQL query to create table Customers.**

Ans. Create a SQL table called *customers* that stores customer ID, name, and address information.

```
CREATE TABLE customers
( customer_id int NOT NULL,
  customer_name char(50) NOT NULL,
  address char(50),
  city char(50),
  state char(25),
  zip_code char(10),
  CONSTRAINT customers_pk PRIMARY KEY (customer_id)
);
```

#### **2. Write SQL query to create table Orders.**

Ans. mysql> create table `order`

```
- > (
- > Id int,
- > Price int
- > );
```

Query OK, 0 rows affected (0.66 sec)

Example: mysql> insert into `order` values(1,200);

Query OK, 1 row affected (0.21 sec)

mysql> insert into `order` values(2,100);

Query OK, 1 row affected (0.17 sec)

mysql> insert into `order` values(3,300);

Query OK, 1 row affected (0.20 sec)

mysql> insert into `order` values(4,1200);

Query OK, 1 row affected (0.13 sec)

mysql> insert into `order` values(5,1000);

Query OK, 1 row affected (0.18 sec)

mysql> insert into `order` values(6,7000);

Query OK, 1 row affected (0.20 sec)

mysql> insert into `order` values(7,900);

Query OK, 1 row affected (0.16 sec)

mysql> insert into `order` values(8,10000);

Query OK, 1 row affected (0.18 sec)

mysql> insert into `order` values(9,1100);

Query OK, 1 row affected (0.30 sec)

mysql> insert into `order` values(10,500);

Query OK, 1 row affected (0.18 sec)

mysql> select \*from `order`;

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

Ans. SELECT ord\_date, customer\_id, ord\_no, shipped\_date, req\_date, status\_1, com\_ments  
FROM orders;

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

Ans. /\* multi-line comment  
another comment \*/  
SELECT \* FROM Orders;

/\*Select all the columns  
of all the records  
in the Orders table:\*/  
SELECT \* FROM Orders;

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

Ans. SELECT date(order\_placed\_date), COUNT(order\_id) AS num\_orders, SUM(order\_total)  
AS daily\_total  
FROM orders  
WHERE order\_placed\_date >= date\_sub(current\_date, INTERVAL 31 DAY)  
GROUP BY date(order\_placed\_date)

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

Ans. SELECT employee\_id, first\_name, last\_name,  
(SELECT department\_name FROM departments d  
WHERE e.department\_id = d.department\_id) department  
FROM employees e ORDER BY department;

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

Ans. SELECT o.orderNumber  
FROM orders o  
LEFT JOIN customers c  
ON c.customerNumber = o.customerNumber  
WHERE c.customerName LIKE 'N%'

/\*Declares your variables\*/  
DECLARE @Initial varchar(1) --Declaring our Initial: Note this is why SQL is self  
documenting  
DECLARE @FieldChoice = int --Declaring our field choice  
SET @Initial = 'N' --Initial to search  
SET @FieldChoice = 1 -- {1,2,3} = {customerName,contactFirstName,contactLastName}

/\*Your query\*/  
SELECT O.orderNumber  
FROM orders O  
INNER JOIN customers C  
ON C.customerNumber = O.customerNumber  
WHERE (LEFT(C.customerName,1) IN (@Initial) AND @FieldChoice = 1)  
OR (LEFT(C.contactFirstName,1) IN (@Initial) AND @FieldChoice = 2)  
OR (LEFT(C.contactLastName,1) IN (@Initial) AND @FieldChoice = 3)

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

Ans. `SELECT orders.ord_no, customer.cust_name  
FROM orders, customer  
WHERE orders.customer_id = customer.customer_id;`

```
SELECT a.cust_name,a.city, b.ord_no,  
b.ord_date,b.purch_amt AS "Order Amount"  
FROM customer a  
LEFT OUTER JOIN orders b  
ON a.customer_id=b.customer_id  
order by b.ord_date;
```

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.

Ans. `SELECT COUNT(*) AS day_of_payment  
FROM payment  
WHERE TO_CHAR (payment_date,'DAU') = '09/12/2022'  
SELECT dau.date, count(*) FROM DAU  
WHERE EXISTS (select 1 from Payer  
WHERE Payer.user_id=DAU.user_id  
AND Payer.payment_timestamp BETWEEN trunc(dau.date)-90 AND trunc(DAU.date))  
GROUP BY dau.date  
ORDER BY Date;`

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

Ans. `SELECT item_mast.pro_name, pro_price, company_mast.com_name  
FROM item_mast  
INNER JOIN company_mast  
ON item_mast.pro_com = company_mast.com_id;`

```
SELECT pro_name as "Item Name", pro_price AS "Price in Rs."  
FROM item_mast;
```

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

Ans. `SELECT P.pro_name AS "Product Name",  
P.pro_price AS "Price",  
C.com_name AS "Company"  
FROM item_mast P, company_mast C  
WHERE P.pro_com = C.com_id  
AND P.pro_price =(SELECT MAX(P.pro_price)  
FROM item_mast P  
WHERE P.pro_com = C.com_id  
);`

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

Ans. SELECT \* FROM customer WHERE grade >  
 ALL (SELECT grade FROM customer  
 WHERE city = 'NewYork');  
 SELECT customer\_id, COUNT(DISTINCT ord\_no),  
 MAX(purch\_amt)  
 FROM orders  
 GROUP BY customer\_id  
 ORDER BY 2 DESC;

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

Ans. SELECT c.STATE, c.CITY, SUM(s.QTY \* s.SALEPRICE)  
 FROM DWSALE s  
 INNER JOIN DWCUST c  
 ON s.dwcustid = c.dwcustid  
 GROUP BY c.STATE, c.CITY  
 ORDER BY c.STATE;  
 SELECT state, city, total  
 FROM (SELECT c.STATE, c.CITY, SUM(s.QTY \* s.SALEPRICE) as total,  
 ROW\_NUMBER() OVER (PARTITION BY c.STATE ORDER BY SUM(s.QTY \*  
 s.SALEPRICE)) as seqnum  
 FROM DWSALE s INNER JOIN  
 DWCUST c ON s.dwcustid = c.dwcustid  
 GROUP BY c.STATE, c.CITY  
 ) sc  
 WHERE seqnum = 1  
 ORDER BY STATE;

**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.

Ans. SELECT e.employee\_name, m.employee\_name AS manager\_name  
 FROM employee e  
 JOIN employee m on e.manager\_id = m.employee\_id  
 SELECT employee\_name AS Employee\_Name, (SELECT employee\_name  
 FROM employee  
 where  
 employeeid=ManagerID ) AS Manager\_Name FROM employee

SELECT e.Employee Name,  
 e.Employee Name as Manager Name  
 FROM Employee e JOIN Employee m  
 ON e.Employee id = m.Manager id

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

Ans. SELECT c.CustomerID, o.OrderID, (ord.Quantity\*p.Price) as  
 Total\_Amount  
 from Customers c inner join Orders o  
 inner join Products p  
 inner join OrderDetails ord  
 on c.CustomerID = o.CustomerID

```
and o.OrderID = ord.OrderID  
and ord.ProductID = p.ProductID;
```

```
SELECT c.CustomerID, SUM(ord.Quantity*p.Price) as  
Total_Amount  
FROM Customers c inner join Orders o  
    on c.CustomerID = o.CustomerID join  
    OrderDetails ord  
    on o.OrderID = ord.OrderID join  
    Products p  
    on ord.ProductID = p.ProductID  
GROUP BY CustomerID;
```