

### **ASSIGNMENT :-3**

**NAME:**

**ROLL NO:**

**PROBLEM STATEMENTS:** Consider database created in assignment 1 to design SQL queries using SQL DML statements : Insert, Select, Update, Delete with operators, function and set operator.

### A) Exercise on retrieving records from a table.

**1) Find the name of all Client.**

```
mysql> select name from CLIENT_MASTER;
```

```
+-----+
| name   |
+-----+
| IVAN BAYROSS |
| MAMTA MUZUMDAR |
| CHHAYA BANKER |
| ASHWINI JOSHI |
| HANSEL COLACO |
| DIPAK SHARMA |
+-----+
6 rows in set (0.00 sec)
```

**2) Retrieve the contents of the CLIENT\_MASTER table.**

```
mysql> SELECT * FROM CLIENT_MASTER;
```

```

+-----+-----+-----+-----+-----+-----+-----+
| CLIENT_NO | NAME           | ADDRESS1 | ADDRESS2 | CITY     | PINCODE | STATE   |
| BAL_DUE  | TELEPHONE     |          |          |          |          |         |
+-----+-----+-----+-----+-----+-----+-----+
| C00001   | IVAN BAYROSS  | NASHIK   | YEOLA    | MUMBAI   | 400054  | MAHARASHTRA |
15000.00 | NULL         |          |          |          |          |             |
| C00002   | MAMTA MUZUMDAR | NIMANI   | CBS      | MADRAS   | 780001  | TAMIL NADU  |
0.00    | NULL         |          |          |          |          |             |
| C00003   | CHHAYA BANKER | DWARKA   | ASHOKNAGAR | MUMBAI   | 400057  | MAHARASHTRA |
5000.00 | NULL         |          |          |          |          |             |
| C00004   | ASHWINI JOSHI | RK       | SHALIMAR | BANGALORE | 560001  | KARNATAKA   |
0.00    | NULL         |          |          |          |          |             |
| C00005   | HANSEL COLACO | KOPARGAON | LASLGAON | MUMBAI   | 400060  | MAHARASHTRA |
2000.00 | NULL         |          |          |          |          |             |
| C00006   | DIPAK SHARMA  | VAIJAPUR | VINCHUR  | BANGALORE | 560050  | KARNATAKA   |
0.00    | NULL         |          |          |          |          |             |
+-----+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

```

### 3) Retrieve the list of names, city, and the states of the clients.

```
mysql> SELECT NAME,CITY,STATE FROM CLIENT_MASTER;
```

```
+-----+-----+-----+
| NAME      | CITY    | STATE    |
+-----+-----+-----+
| IVAN BAYROSS | MUMBAI  | MAHARASHTRA |
| MAMTA MUZUMDAR | MADRAS  | TAMIL NADU  |
| CHHAYA BANKER | MUMBAI  | MAHARASHTRA |
| ASHWINI JOSHI | BANGALORE | KARNATAKA  |
| HANSEL COLACO | MUMBAI  | MAHARASHTRA |
| DIPAK SHARMA | BANGALORE | KARNATAKA  |
+-----+-----+-----+
```

6 rows in set (0.00 sec)

---

### 4) List the various products available from the Product\_Master table.

```
mysql> SELECT DESCRIPTION FROM PRODUCT_MASTER;
```

```
+-----+
| DESCRIPTION |
+-----+
| T-SHIRTS    |
| SHIRTS      |
| COTTON JEANS |
| JEANS       |
| TROUSERS    |
| PULL OVERS  |
| DEIM SHIRTS |
| LYCRA TOPS  |
| SKIRTS      |
+-----+
```

9 rows in set (0.01 sec)

---

### 5) List all the Client who are located in Mumbai.

```
mysql> SELECT * FROM CLIENT_MASTER WHERE CITY='MUMBAI';
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+
| CLIENT_NO | NAME      | ADDRESS1 | ADDRESS2 | CITY | PINCODE | STATE    | BAL_DUE |
| TELEPHONE |
+-----+-----+-----+-----+-----+-----+-----+-----+
| C00001    | IVAN BAYROSS | NASHIK   | YEOLA    | MUMBAI | 400054 | MAHARASHTRA | 15000.00 |
|          | NULL        |          |          |          |          |          |          |
| C00003    | CHHAYA BANKER | DWARKA   | ASHOKNAGAR | MUMBAI | 400057 | MAHARASHTRA | 5000.00 |
|          | NULL        |          |          |          |          |          |          |
| C00005    | HANSEL COLACO | KOPARGAON | LASLGAON  | MUMBAI | 400060 | MAHARASHTRA | 2000.00 |
|          | NULL        |          |          |          |          |          |          |
+-----+-----+-----+-----+-----+-----+-----+-----+
```

3 rows in set (0.00 sec)

---

### 6) Find the names of salesman who have a salary equal to Rs. 3000.

```
mysql> SELECT SALESMAN_NAME FROM Sman_mast WHERE SAL_AMT = '3000';
```

```
+-----+
| SALESMAN_NAME |
+-----+
| AMAN          |
| OMKAR         |
| RAJ           |
| ASHISH        |
+-----+
```

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

---

\*\*\*\*\*

### **B) Exercise on updating records in a table.**

\*\*\*\*\*

#### **1) Change the city of ClientNo C00005 to 'Bangalore'.**

```
mysql> UPDATE CLIENT_MASTER SET CITY='BANGLORE' WHERE CLIENT_NO='C00005';
Query OK, 1 row affected (0.06 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> SELECT CLIENT_NO,CITY FROM CLIENT_MASTER WHERE CITY='BANGLORE';
```

```
+-----+-----+
| CLIENT_NO | CITY   |
+-----+-----+
| C00005    | BANGLORE |
+-----+-----+
```

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

---

#### **2) Change the BalDue of ClientNo C00001 to Rs.1000.**

```
mysql> UPDATE CLIENT_MASTER SET BAL_DUE='1000' WHERE CLIENT_NO='C00001';
Query OK, 1 row affected (0.08 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> SELECT CLIENT_NO,BAL_DUE FROM CLIENT_MASTER WHERE BAL_DUE='1000';
```

```
+-----+-----+
| CLIENT_NO | BAL_DUE |
+-----+-----+
| C00001    | 1000.00 |
+-----+-----+
```

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

---

#### **3) Change the Cost Price of Trouser to Rs.950.00.**

```
mysql> UPDATE PRODUCT_MASTER SET COST_PRICE = '950.00' WHERE
DESCRIPTION='TROUSERS';
Query OK, 1 row affected (0.06 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> SELECT DESCRIPTION,COST_PRICE FROM PRODUCT_MASTER WHERE
DESCRIPTION='TROUSERS';
+-----+-----+
| DESCRIPTION | COST_PRICE |
+-----+-----+
| TROUSERS   | 950.00    |
+-----+-----+
1 row in set (0.00 sec)
```

---

#### 4) Change the city of the salesman to Pune.

```
mysql> UPDATE Sman_mast SET CITY='PUNE';
Query OK, 4 rows affected (0.09 sec)
Rows matched: 4 Changed: 4 Warnings: 0
```

```
mysql> SELECT CITY FROM Sman_mast;
+-----+
| CITY |
+-----+
| PUNE |
| PUNE |
| PUNE |
| PUNE |
+-----+
4 rows in set (0.01 sec)
```

\*\*\*\*\*

#### C) Exercise on deleting records in table.

\*\*\*\*\*

##### 1) Delete all salesman from the salesman\_master where salary are equal to Rs. 3500.

```
mysql> DELETE FROM Sman_mast WHERE SAL_AMT=3500;
Query OK, 0 rows affected (0.02 sec)

mysql> SELECT * FROM Sman_mast WHERE SAL_AMT=3500;
Empty set (0.00 sec)
```

---

##### 2) Delete all Products from Product\_Master where qty\_on\_hand is equal to 100.

```
mysql> DELETE FROM PRODUCT_MASTER WHERE QTY_ON_HAND=100;
```

---

##### 3) Delete from Client\_Master where the cloumn satet holds the value 'Tamil Nadu'.

```
DELETE FROM CLIENT_MASTER WHERE CITY='TAMILNADU';
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> SELECT * FROM CLIENT_MASTER WHERE CITY='TAMILNADU';
Empty set (0.00 sec)
```

\*\*\*\*\*

**D) Perform the following computations on the table data.**

\*\*\*\*\*

**1) List the name of all client having 'a' as the second letter in their names.**

```
mysql> SELECT NAME FROM CLIENT_MASTER WHERE NAME LIKE '_a%';
```

```
+-----+
| NAME   |
+-----+
| MAMTA MUZUMDAR |
| HANSEL COLACO  |
+-----+
2 rows in set (0.00 sec)
```

---

**2) List the client who stay in in the city whose first letter is 'M'.**

```
mysql> SELECT NAME,CITY FROM CLIENT_MASTER WHERE CITY LIKE 'M%';
```

```
+-----+-----+
| NAME   | CITY |
+-----+-----+
| IVAN BAYROSS | MUMBAI |
| MAMTA MUZUMDAR | MADRAS |
| CHHAYA BANKER | MUMBAI |
+-----+-----+
3 rows in set (0.00 sec)
```

---

**3) List all clients who stays in 'Banglore' or 'Manglore'.**

```
mysql> SELECT NAME,CITY FROM CLIENT_MASTER WHERE CITY LIKE 'BANGLORE' OR CITY LIKE 'MANGALORE';
```

```
+-----+-----+
| NAME   | CITY |
+-----+-----+
| HANSEL COLACO | BANGLORE |
+-----+-----+
1 row in set (0.00 sec)
```

---

**4) List all the clients whose Bal\_due is greater than value 10000.**

```
mysql> SELECT * FROM CLIENT_MASTER WHERE BAL_DUE > 10000;
Empty set (0.00 sec)
```

---

**5) List all information from the Sales\_Order table for Orders placed in month of june.**

```
mysql> SELECT * FROM SALES_ORDER WHERE ORDER_DATE LIKE '____06%';
```

```
+-----+-----+-----+-----+-----+-----+
| ORDER_NO | CLIENT_NO | ORDER_DATE | DELY_ADDR | SALESMAN_NO | DELY_TYPE |
| BILLYN | DELY_DATE | ORDER_STATUS |
+-----+-----+-----+-----+-----+-----+-----+
```

```
| O19001 | C00001 | 2004-06-12 | NASHIK | S00001 | F | N | 2002-07-20 | In Process
| O19002 | C00002 | 2004-06-25 | NASHIK | S00002 | P | N | 2002-06-27 | Cancelled
+-----+-----+-----+-----+-----+-----+-----+-----+
2 rows in set, 1 warning (0.00 sec)
```

---

## 6) List the order information for ClientNO 'C00001' and 'C00002'.

```
mysql> SELECT * FROM SALES_ORDER WHERE CLIENT_NO IN('C00001','C00002');
+-----+-----+-----+-----+-----+-----+-----+-----+
| ORDER_NO | CLIENT_NO | ORDER_DATE | DELY_ADDR | SALESMAN_NO | DELY_TYPE | BILLYN | DELY_DATE | ORDER_STATUS |
+-----+-----+-----+-----+-----+-----+-----+-----+
| O19001 | C00001 | 2004-06-12 | NASHIK | S00001 | F | N | 2002-07-20 | In Process
| O19002 | C00002 | 2004-06-25 | NASHIK | S00002 | P | N | 2002-06-27 | Cancelled
| O19003 | C00001 | 2004-04-03 | NASHIK | S00001 | F | Y | 2002-04-07 | Fulfilled
+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

---

## 7) List the products whose selling price is greater than 500 and less than or equal to 750.

```
mysql> SELECT * FROM PRODUCT_MASTER WHERE SELL_PRICE>500 AND SELL_PRICE<=750;
+-----+-----+-----+-----+-----+-----+-----+-----+
| PRODUCT_NO | DESCRIPTION | PROFIT_PERSCENT | UNIT_MEASURE | QTY_ON_HAND | REORDER_LVL | SELL_PRICE | COST_PRICE |
+-----+-----+-----+-----+-----+-----+-----+-----+
| P06734 | COTTON JEANS | 5.00 | PIECE | 100 | 20 | 600.00 | 450.00 |
| P07865 | JEANS | 5.00 | PIECE | 100 | 20 | 750.00 | 500.00 |
| P07885 | PULL OVERS | 2.50 | PIECE | 80 | 30 | 700.00 | 450.00 |
+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

---

## 8) List products whose selling price is more than 500 and less than or equal to 750.

```
mysql> SELECT * FROM PRODUCT_MASTER WHERE SELL_PRICE>500 AND SELL_PRICE<=750;
+-----+-----+-----+-----+-----+-----+-----+-----+
| PRODUCT_NO | DESCRIPTION | PROFIT_PERSCENT | UNIT_MEASURE | QTY_ON_HAND | REORDER_LVL | SELL_PRICE | COST_PRICE |
+-----+-----+-----+-----+-----+-----+-----+-----+
| P06734 | COTTON JEANS | 5.00 | PIECE | 100 | 20 | 600.00 | 450.00 |
| P07865 | JEANS | 5.00 | PIECE | 100 | 20 | 750.00 | 500.00 |
| P07885 | PULL OVERS | 2.50 | PIECE | 80 | 30 | 700.00 | 450.00 |
+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

---

## 9) List products whose selling price is more than 500., Calculate a new selling price

as,

**original selling price \*.15. Rename the new column in the output of the above query as new\_price.**

```
mysql> SELECT DESCRIPTION, SELL_PRICE*0.15 "NEW_PRICE" FROM PRODUCT_MASTER  
WHERE SELL_PRICE > 500;
```

```
+-----+-----+  
| DESCRIPTION | "NEW_PRICE" |  
+-----+-----+  
| COTTON JEANS |      90.00 |  
| JEANS       |     112.50 |  
| TROUSERS    |     127.50 |  
| PULL OVERS  |     105.00 |  
+-----+-----+
```

4 rows in set (0.00 sec)

---

**10) List the Names, City, and State of clients who are not in the state of 'Maharashtra'.**

```
mysql> SELECT NAME,CITY,STATE FROM CLIENT_MASTER WHERE STATE<> 'MAHARASHTRA';
```

```
+-----+-----+-----+  
| NAME      | CITY   | STATE   |  
+-----+-----+-----+  
| MAMTA MUZUMDAR | MADRAS  | TAMIL NADU |  
| ASHWINI JOSHI  | BANGALORE | KARNATAKA |  
| DIPAK SHARMA   | BANGALORE | KARNATAKA |  
+-----+-----+-----+
```

3 rows in set (0.00 sec)

---

**11) Count total number of all the products.**

```
mysql> SELECT COUNT(*) "TOTAL_NO_OF_PRODUCTS" FROM PRODUCT_MASTER;
```

```
+-----+  
| TOTAL_NO_OF_PRODUCTS |  
+-----+  
|          9 |  
+-----+
```

1 row in set (0.01 sec)

---

**12) Calculate the average price of all the products.**

```
mysql> SELECT AVG(SELL_PRICE)"AVERAGE_PRICE" FROM PRODUCT_MASTER;
```

```
+-----+  
| AVERAGE_PRICE |  
+-----+  
|  538.888889 |  
+-----+
```

1 row in set (0.00 sec)

---

**13) Determine the maximum and minimum product prices. Rename the output as max\_price**

**and min\_price respectively.**

```
mysql> SELECT MAX(SELL_PRICE)"MAX_PRICE" FROM PRODUCT_MASTER;
```

```
+-----+
| MAX_PRICE |
+-----+
| 850.00 |
+-----+
```

1 row in set (0.00 sec)

```
mysql> SELECT MIN(SELL_PRICE)"MIN_PRICE" FROM PRODUCT_MASTER;
```

```
+-----+
| MIN_PRICE |
+-----+
| 300.00 |
+-----+
```

1 row in set (0.00 sec)

---

**14) Count the number of products having price less than or equal to 500.**

```
mysql> SELECT COUNT(SELL_PRICE) FROM PRODUCT_MASTER WHERE SELL_PRICE<=500;
```

```
+-----+
| COUNT(SELL_PRICE) |
+-----+
| 5 |
+-----+
```

1 row in set (0.00 sec)

---

**15) List all the products whose QtyonHand is less than reorder level.**

```
mysql> SELECT DESCRIPTION FROM PRODUCT_MASTER WHERE
QTY_ON_HAND<REORDER_LVL;
```

Empty set (0.00 sec)

\*\*\*\*\*

### **E) Exercise on Date Manupulation.**

\*\*\*\*\*

**1) List the order number and day on which clients placed their order.**

```
mysql> SELECT ORDER_NO, DAYNAME(ORDER_DATE) FROM SALES_ORDER;
```

```
+-----+-----+
| ORDER_NO | DAYNAME(ORDER_DATE) |
+-----+-----+
| O19001 | Saturday |
| O19002 | Friday |
| O19003 | Saturday |
| O19008 | Monday |
| O46865 | Wednesday |
| O46866 | Thursday |
+-----+-----+
```

6 rows in set (0.02 sec)

---



## 2) List the month(in alphabhets) and date when the orders must be delivered.

```
mysql> SELECT ORDER_NO,MONTHNAME(DELY_DATE),DAY(DELY_DATE) FROM SALES_ORDER;
```

```
+-----+-----+-----+
| ORDER_NO | MONTHNAME(DELY_DATE) | DAY(DELY_DATE) |
+-----+-----+-----+
| O19001   | July                 | 20             |
| O19002   | June                 | 27             |
| O19003   | April                | 7              |
| O19008   | July                 | 26             |
| O46865   | February             | 20             |
| O46866   | May                  | 22             |
+-----+-----+-----+
```

6 rows in set (0.00 sec)

---

## 3) List the OrderDate in the format 'DD-MM-YY'. Eg. 12-February-02.

```
mysql> SELECT ORDER_NO,DATE_FORMAT(ORDER_DATE,'%d-%M-%y') FROM SALES_ORDER;
```

```
+-----+-----+-----+
| ORDER_NO | DATE_FORMAT(ORDER_DATE,'%d-%M-%y') |
+-----+-----+-----+
| O19001   | 12-June-04                       |
| O19002   | 25-June-04                       |
| O19003   | 03-April-04                      |
| O19008   | 24-May-04                        |
| O46865   | 18-February-04                   |
| O46866   | 20-May-04                        |
+-----+-----+-----+
```

6 rows in set (0.00 sec)

---

## 4) List the date, 15 days after today's date.

```
mysql> SELECT CURDATE();
```

```
+-----+
| CURDATE() |
+-----+
| 2017-09-05 |
+-----+
```

1 row in set (0.00 sec)

```
mysql> SELECT DATE_ADD(CURDATE(),INTERVAL 15 DAY);
```

```
+-----+
| DATE_ADD(CURDATE(),INTERVAL 15 DAY) |
+-----+
| 2017-09-20 |
+-----+
```

1 row in set (0.00 sec)

\*\*\*\*\*