

DBMS ASSIGNMENT (SY_A , Batch : AS1, Roll_No : 28)

1. Create the tables described below :

```
mysql> use sales_management;
Database changed
mysql> CREATE TABLE CLIENT_MASTER (CLIENTNO VARCHAR(6), NAME VARCHAR(20), ADDRESS1 VARCHAR(30), ADDRESS2 VARCHAR(30), CITY VARCHAR(15), PINCODE BIGINT, STATE VARCHAR(15), BALDUE DECIMAL(10,2));
Query OK, 0 rows affected (0.05 sec)

mysql> CREATE TABLE PRODUCT_MASTER (PRODUCTNO VARCHAR(6), DESCRIPTION VARCHAR(15), PROFITPERCENT DECIMAL(4,2), UNITMEASURE VARCHAR(10), QTYONHAND INT, REORD ERLVL INT, SELLPRICE DECIMAL(8,2), COSTPRICE DECIMAL(8,2));
Query OK, 0 rows affected (0.05 sec)

mysql> CREATE TABLE SALESMAN_MASTER (SALESMANNO VARCHAR(6), SALESMANNAME VARCHAR(20), ADDRESS1 VARCHAR(30), ADDRESS2 VARCHAR(30), CITY VARCHAR(20), PINCODE BIGINT, STATE VARCHAR(20), SALAMT DECIMAL(8,2), TGTTOGET DECIMAL(6,2), YTDSALES DECIMAL(6,2), REMARKS VARCHAR(60));
Query OK, 0 rows affected (0.05 sec)

mysql> show tables;
+-----+
| Tables_in_sales_management |
+-----+
| client_master              |
| product_master               |
| salesman_master              |
+-----+
3 rows in set (0.00 sec)
```

2. Insert the following data into their respective tables :

```
mysql> INSERT INTO CLIENT_MASTER (CLIENTNO, NAME, CITY, PINCODE, STATE, BALDUE)
   -> VALUES ('C00001','Ivan Bayross','Mumbai',400054,'Maharashtra',15000);
Query OK, 1 row affected (0.03 sec)

mysql>
mysql> INSERT INTO CLIENT_MASTER (CLIENTNO, NAME, CITY, PINCODE, STATE, BALDUE)
   -> VALUES ('C00002','Mamta Muzumdar','Madras',780001,'Tamil Nadu',0);
Query OK, 1 row affected (0.01 sec)

mysql>
mysql> INSERT INTO CLIENT_MASTER (CLIENTNO, NAME, CITY, PINCODE, STATE, BALDUE)
   -> VALUES ('C00003','Chhaya Bankar','Mumbai',400057,'Maharashtra',500);
Query OK, 1 row affected (0.00 sec)

mysql>
mysql> INSERT INTO CLIENT_MASTER (CLIENTNO, NAME, CITY, PINCODE, STATE, BALDUE)
   -> VALUES ('C00004','Ashwini Joshi','Bangalore',560001,'Karnataka',0);
Query OK, 1 row affected (0.00 sec)

mysql>
mysql> INSERT INTO CLIENT_MASTER (CLIENTNO, NAME, CITY, PINCODE, STATE, BALDUE)
   -> VALUES ('C00005','Hansel Colaco','Mumbai',400060,'Maharashtra',2000);
Query OK, 1 row affected (0.00 sec)

mysql>
mysql> INSERT INTO CLIENT_MASTER (CLIENTNO, NAME, CITY, PINCODE, STATE, BALDUE)
   -> VALUES ('C00006','Deepak Sharma','Mangalore',560050,'Karnataka',0);
Query OK, 1 row affected (0.00 sec)

mysql> select* from CLIENT_MASTER;
+-----+-----+-----+-----+-----+-----+-----+-----+
| CLIENTNO | NAME      | ADDRESS1 | ADDRESS2 | CITY     | PINCODE | STATE    | BALDUE  |
+-----+-----+-----+-----+-----+-----+-----+-----+
| C00001  | Ivan Bayross | NULL     | NULL     | Mumbai   | 400054  | Maharashtra | 15000.00 |
| C00002  | Mamta Muzumdar | NULL     | NULL     | Madras   | 780001  | Tamil Nadu | 0.00    |
| C00003  | Chhaya Bankar  | NULL     | NULL     | Mumbai   | 400057  | Maharashtra | 500.00  |
| C00004  | Ashwini Joshi  | NULL     | NULL     | Bangalore | 560001  | Karnataka | 0.00    |
| C00005  | Hansel Colaco  | NULL     | NULL     | Mumbai   | 400060  | Maharashtra | 2000.00 |
| C00006  | Deepak Sharma  | NULL     | NULL     | Mangalore | 560050  | Karnataka | 0.00    |
+-----+-----+-----+-----+-----+-----+-----+-----+
```

```

mysql> INSERT INTO PRODUCT_MASTER VALUES ('P00001','T-Shirts',5,'Piece',200,50,350,250);
Query OK, 1 row affected (0.03 sec)

mysql> INSERT INTO PRODUCT_MASTER VALUES ('P0345','Shirts',6,'Piece',150,50,500,350);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO PRODUCT_MASTER VALUES ('P06734','Cotton Jeans',5,'Piece',100,20,600,450);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO PRODUCT_MASTER VALUES ('P07865','Jeans',5,'Piece',100,20,750,500);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO PRODUCT_MASTER VALUES ('P07868','Trousers',2,'Piece',150,50,850,550);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO PRODUCT_MASTER VALUES ('P07885','Pull Overs',2.5,'Piece',80,30,700,450);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO PRODUCT_MASTER VALUES ('P07965','Denim Shirts',4,'Piece',100,40,350,250);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO PRODUCT_MASTER VALUES ('P07975','Lycra Tops',5,'Piece',70,30,300,175);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO PRODUCT_MASTER VALUES ('P08865','Skirts',5,'Piece',75,30,450,300);
Query OK, 1 row affected (0.00 sec)

mysql>
mysql> select* from PRODUCT_MASTER;
+-----+-----+-----+-----+-----+-----+-----+-----+
| PRODUCTNO | DESCRIPTION | PROFITPERCENT | UNITMEASURE | QTYONHAND | REORDERLVL | SELLPRICE | COSTPRICE |
+-----+-----+-----+-----+-----+-----+-----+-----+
| P00001 | T-Shirts | 5.00 | Piece | 200 | 50 | 350.00 | 250.00 |
| P0345 | Shirts | 6.00 | Piece | 150 | 50 | 500.00 | 350.00 |
| P06734 | Cotton Jeans | 5.00 | Piece | 100 | 20 | 600.00 | 450.00 |
| P07865 | Jeans | 5.00 | Piece | 100 | 20 | 750.00 | 500.00 |
| P07868 | Trousers | 2.00 | Piece | 150 | 50 | 850.00 | 550.00 |
| P07885 | Pull Overs | 2.50 | Piece | 80 | 30 | 700.00 | 450.00 |
| P07965 | Denim Shirts | 4.00 | Piece | 100 | 40 | 350.00 | 250.00 |
| P07975 | Lycra Tops | 5.00 | Piece | 70 | 30 | 300.00 | 175.00 |
| P08865 | Skirts | 5.00 | Piece | 75 | 30 | 450.00 | 300.00 |

```

```

mysql> INSERT INTO SALESMAN_MASTER VALUES ('S00001','Aman','A/14','Worli','Mumbai',400002,'Maharashtra',3000,100,50,'Good');
Query OK, 1 row affected (0.03 sec)

mysql> INSERT INTO SALESMAN_MASTER VALUES ('S00002','Omkar','65','Nariman','Mumbai',400001,'Maharashtra',3000,200,100,'Good');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO SALESMAN_MASTER VALUES ('S00003','Raj','P-7','Bandra','Mumbai',400032,'Maharashtra',3000,200,100,'Good');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO SALESMAN_MASTER VALUES ('S00004','Ashish','A/5','Juhu','Mumbai',400044,'Maharashtra',3500,200,150,'Good');
Query OK, 1 row affected (0.00 sec)

mysql> SELECT* FROM SALESMAN_MASTER;
-> SELECT* FROM SALESMAN_MASTER;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'SELECT* FROM SALESMAN_MASTER' at line 2
mysql> SELECT * FROM SALESMAN_MASTER;
+-----+-----+-----+-----+-----+-----+-----+-----+
| SALESMANNO | SALESMANNAME | ADDRESS1 | ADDRESS2 | CITY | PINCODE | STATE | SALAMT | TGTTOGET | YTDSALES | REMARKS |
+-----+-----+-----+-----+-----+-----+-----+-----+
| S00001 | Aman | A/14 | Worli | Mumbai | 400002 | Maharashtra | 3000.00 | 100.00 | 50.00 | Good |
| S00002 | Omkar | 65 | Nariman | Mumbai | 400001 | Maharashtra | 3000.00 | 200.00 | 100.00 | Good |
| S00003 | Raj | P-7 | Bandra | Mumbai | 400032 | Maharashtra | 3000.00 | 200.00 | 100.00 | Good |
| S00004 | Ashish | A/5 | Juhu | Mumbai | 400044 | Maharashtra | 3500.00 | 200.00 | 150.00 | Good |

```

4 rows in set (0.00 sec)

3. Exercise on retrieving records from the tables :

- a. Find out the names of all the clients.

```
mysql> SELECT NAME FROM CLIENT_MASTER;
+-----+
| NAME |
+-----+
| Ivan Bayross |
| Mamta Muzumdar |
| Chhaya Bankar |
| Ashwini Joshi |
| Hansel Colaco |
| Deepak Sharma |
+-----+
6 rows in set (0.00 sec)
```

- b. Retrieve the entire contents of the CLIENT_MASTER table.

```
mysql> SELECT * FROM CLIENT_MASTER;
+-----+-----+-----+-----+-----+-----+-----+-----+
| CLIENTNO | NAME | ADDRESS1 | ADDRESS2 | CITY | PINCODE | STATE | BALDUE |
+-----+-----+-----+-----+-----+-----+-----+-----+
| C00001 | Ivan Bayross | NULL | NULL | Mumbai | 400054 | Maharashtra | 15000.00 |
| C00002 | Mamta Muzumdar | NULL | NULL | Madras | 780001 | Tamil Nadu | 0.00 |
| C00003 | Chhaya Bankar | NULL | NULL | Mumbai | 400057 | Maharashtra | 500.00 |
| C00004 | Ashwini Joshi | NULL | NULL | Bangalore | 560001 | Karnataka | 0.00 |
| C00005 | Hansel Colaco | NULL | NULL | Mumbai | 400060 | Maharashtra | 2000.00 |
| C00006 | Deepak Sharma | NULL | NULL | Mangalore | 560050 | Karnataka | 0.00 |
+-----+-----+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

- c. Retrieve the list of names, city and the state of all the clients.

```
mysql> SELECT NAME, CITY, STATE FROM CLIENT_MASTER;
+-----+-----+-----+
| NAME | CITY | STATE |
+-----+-----+-----+
| Ivan Bayross | Mumbai | Maharashtra |
| Mamta Muzumdar | Madras | Tamil Nadu |
| Chhaya Bankar | Mumbai | Maharashtra |
| Ashwini Joshi | Bangalore | Karnataka |
| Hansel Colaco | Mumbai | Maharashtra |
| Deepak Sharma | Mangalore | Karnataka |
+-----+-----+-----+
6 rows in set (0.00 sec)
```

d. 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 |
| Denim Shirts |
| Lycra Tops  |
| Skirts      |
+-----+
9 rows in set (0.00 sec)
```

e. List all the clients who are located in Mumbai.

```
mysql> SELECT * FROM CLIENT_MASTER WHERE CITY = 'Mumbai';
+-----+-----+-----+-----+-----+-----+-----+-----+
| CLIENTNO | NAME      | ADDRESS1 | ADDRESS2 | CITY    | PINCODE | STATE   | BALDUE |
+-----+-----+-----+-----+-----+-----+-----+-----+
| C00001   | Ivan Bayross | NULL     | NULL     | Mumbai  | 400054  | Maharashtra | 15000.00 |
| C00003   | Chhaya Bankar | NULL     | NULL     | Mumbai  | 400057  | Maharashtra | 500.00  |
| C00005   | Hansel Colaco | NULL     | NULL     | Mumbai  | 400060  | Maharashtra | 2000.00 |
+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

f. Find the names of salesman who have a salary equal to Rs.3000.

```
mysql> SELECT SALESMANNAME FROM SALESMAN_MASTER WHERE SALAMT = 3000;
+-----+
| SALESMANNAME |
+-----+
| Aman        |
| Omkar       |
| Raj         |
+-----+
3 rows in set (0.00 sec)
```

4. Exercise on updating records in a table.

a. Change the city of ClientNo 'C00005' to 'Bangalore'.

```

mysql> UPDATE CLIENT_MASTER SET CITY = 'Bangalore' WHERE CLIENTNO = 'C00005';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from CLIENT_MASTER;
+-----+-----+-----+-----+-----+-----+-----+-----+
| CLIENTNO | NAME | ADDRESS1 | ADDRESS2 | CITY | PINCODE | STATE | BALDUE |
+-----+-----+-----+-----+-----+-----+-----+-----+
| C00001 | Ivan Bayross | NULL | NULL | Mumbai | 400054 | Maharashtra | 15000.00 |
| C00002 | Mamta Muzumdar | NULL | NULL | Madras | 780001 | Tamil Nadu | 0.00 |
| C00003 | Chhaya Bankar | NULL | NULL | Mumbai | 400057 | Maharashtra | 500.00 |
| C00004 | Ashwini Joshi | NULL | NULL | Bangalore | 560001 | Karnataka | 0.00 |
| C00005 | Hansel Colaco | NULL | NULL | Bangalore | 400060 | Maharashtra | 2000.00 |
| C00006 | Deepak Sharma | NULL | NULL | Mangalore | 560050 | Karnataka | 0.00 |
+-----+-----+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

```

b. Change the BalDue of ClientNo 'C00001' to Rs. 1000.

```

mysql> UPDATE CLIENT_MASTER SET BALDUE = 1000 WHERE CLIENTNO = 'C00001';
Query OK, 1 row affected (0.03 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from CLIENT_MASTER;
+-----+-----+-----+-----+-----+-----+-----+-----+
| CLIENTNO | NAME | ADDRESS1 | ADDRESS2 | CITY | PINCODE | STATE | BALDUE |
+-----+-----+-----+-----+-----+-----+-----+-----+
| C00001 | Ivan Bayross | NULL | NULL | Mumbai | 400054 | Maharashtra | 1000.00 |
| C00002 | Mamta Muzundar | NULL | NULL | Madras | 780001 | Tamil Nadu | 0.00 |
| C00003 | Chhaya Bankar | NULL | NULL | Mumbai | 400057 | Maharashtra | 500.00 |
| C00004 | Ashwini Joshi | NULL | NULL | Bangalore | 560001 | Karnataka | 0.00 |
| C00005 | Hansel Colaco | NULL | NULL | Bangalore | 400060 | Maharashtra | 2000.00 |
| C00006 | Deepak Sharma | NULL | NULL | Mangalore | 560050 | Karnataka | 0.00 |
+-----+-----+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

```

c. Change the cost price of 'Trousers' to Rs. 950.00.

```

mysql> UPDATE PRODUCT_MASTER SET COSTPRICE = 950 WHERE DESCRIPTION = 'Trousers';
Query OK, 1 row affected (0.03 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from PRODUCT_MASTER;
+-----+-----+-----+-----+-----+-----+-----+-----+
| PRODUCTNO | DESCRIPTION | PROFITPERCENT | UNITMEASURE | QTYONHAND | REORDERLVL | SELLPRICE | COSTPRICE |
+-----+-----+-----+-----+-----+-----+-----+-----+
| P00001 | T-Shirts | 5.00 | Piece | 200 | 50 | 350.00 | 250.00 |
| P0345 | Shirts | 6.00 | Piece | 150 | 50 | 500.00 | 350.00 |
| P06734 | Cotton Jeans | 5.00 | Piece | 100 | 20 | 600.00 | 450.00 |
| P07865 | Jeans | 5.00 | Piece | 100 | 20 | 750.00 | 500.00 |
| P07868 | Trousers | 2.00 | Piece | 150 | 50 | 850.00 | 950.00 |
| P07885 | Pull Overs | 2.50 | Piece | 80 | 30 | 700.00 | 450.00 |
| P07965 | Denim Shirts | 4.00 | Piece | 100 | 40 | 350.00 | 250.00 |
| P07975 | Lycra Tops | 5.00 | Piece | 70 | 30 | 300.00 | 175.00 |
| P08865 | Skirts | 5.00 | Piece | 75 | 30 | 450.00 | 300.00 |
+-----+-----+-----+-----+-----+-----+-----+-----+
9 rows in set (0.00 sec)

```

d. Change the city of the salesman to Pune.

5. Exercise on deleting records in a table :

- a. Delete all the salesmen whose salaries are equal to Rs. 3500

```
mysql> DELETE FROM SALESMAN_MASTER WHERE SALAMT = 3500;
Query OK, 1 row affected (0.01 sec)

mysql> select * from SALESMAN_MASTER;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| SALESMANNO | SALESMANNAME | ADDRESS1 | ADDRESS2 | CITY | PINCODE | STATE | SALAMT | TGTTOGET | YTDSALES | REMARKS |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| S00001 | Aman | A/14 | Worli | Pune | 400002 | Maharashtra | 3000.00 | 100.00 | 50.00 | Good |
| S00002 | Omkar | 65 | Nariman | Pune | 400001 | Maharashtra | 3000.00 | 200.00 | 100.00 | Good |
| S00003 | Raj | P-7 | Bandra | Pune | 400032 | Maharashtra | 3000.00 | 200.00 | 100.00 | Good |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

- b. Delete all products from PRODUCT_MASTER where the quantity on hand is equal to 100

```
mysql> DELETE FROM PRODUCT_MASTER WHERE QTYONHAND = 100;
Query OK, 3 rows affected (0.01 sec)

mysql> select * from PRODUCT_MASTER;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| PRODUCTNO | DESCRIPTION | PROFITPERCENT | UNITMEASURE | QTYONHAND | REORDERLVL | SELLPRICE | COSTPRICE |
+-----+-----+-----+-----+-----+-----+-----+-----+
| P00001 | T-Shirts | 5.00 | Piece | 200 | 50 | 350.00 | 250.00 |
| P0345 | Shirts | 6.00 | Piece | 150 | 50 | 500.00 | 350.00 |
| P07868 | Trousers | 2.00 | Piece | 150 | 50 | 850.00 | 950.00 |
| P07885 | Pull Overs | 2.50 | Piece | 80 | 30 | 700.00 | 450.00 |
| P07975 | Lycra Tops | 5.00 | Piece | 70 | 30 | 300.00 | 175.00 |
| P08865 | Skirts | 5.00 | Piece | 75 | 30 | 450.00 | 300.00 |
+-----+-----+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

- c. Delete from CLIENT_MASTER where the column STATE holds the value Tamil Nadu

```
mysql> DELETE FROM CLIENT_MASTER WHERE STATE = 'Tamil Nadu';
Query OK, 1 row affected (0.02 sec)

mysql> select * from CLIENT_MASTER;
+-----+-----+-----+-----+-----+-----+-----+-----+
| CLIENTNO | NAME | ADDRESS1 | ADDRESS2 | CITY | PINCODE | STATE | BALDUE |
+-----+-----+-----+-----+-----+-----+-----+
| C00001 | Ivan Bayross | NULL | NULL | Mumbai | 400054 | Maharashtra | 1000.00 |
| C00003 | Chhaya Bankar | NULL | NULL | Mumbai | 400057 | Maharashtra | 500.00 |
| C00004 | Ashwini Joshi | NULL | NULL | Bangalore | 560001 | Karnataka | 0.00 |
| C00005 | Hansel Colaco | NULL | NULL | Bangalore | 400060 | Maharashtra | 2000.00 |
| C00006 | Deepak Sharma | NULL | NULL | Mangalore | 560050 | Karnataka | 0.00 |
+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

6. Exercise on altering the table structure :

- a. Add a column called Telephone of data type NUMBER and size 10 to the CLIENT_MASTER table

```
mysql> ALTER TABLE CLIENT_MASTER ADD TELEPHONE BIGINT;
```

```
Query OK, 0 rows affected (0.04 sec)
```

```
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> DESC CLIENT_MASTER;
```

Field	Type	Null	Key	Default	Extra
CLIENTNO	varchar(6)	YES		NULL	
NAME	varchar(20)	YES		NULL	
ADDRESS1	varchar(30)	YES		NULL	
ADDRESS2	varchar(30)	YES		NULL	
CITY	varchar(15)	YES		NULL	
PINCODE	bigint	YES		NULL	
STATE	varchar(15)	YES		NULL	
BALDUE	decimal(10,2)	YES		NULL	
TELEPHONE	bigint	YES		NULL	

```
9 rows in set (0.01 sec)
```

- b. Change the size of SELLPRICE column in PRODUCT_MASTER to 10,2

```
mysql> ALTER TABLE PRODUCT_MASTER MODIFY SELLPRICE DECIMAL(10,2);
```

```
Query OK, 6 rows affected (0.07 sec)
```

```
Records: 6  Duplicates: 0  Warnings: 0
```

```
mysql> DESC PRODUCT_MASTER;
```

Field	Type	Null	Key	Default	Extra
PRODUCTNO	varchar(6)	YES		NULL	
DESCRIPTION	varchar(15)	YES		NULL	
PROFITPERCENT	decimal(4,2)	YES		NULL	
UNITMEASURE	varchar(10)	YES		NULL	
QTYONHAND	int	YES		NULL	
REORDERLVL	int	YES		NULL	
SELLPRICE	decimal(10,2)	YES		NULL	
COSTPRICE	decimal(8,2)	YES		NULL	

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

7. Exercise on deleting the table structure along with the data :

- a. Destroy the table CLIENT_MASTER along with its data

```
mysql> DROP TABLE CLIENT_MASTER;
Query OK, 0 rows affected (0.04 sec)

mysql> show tables
-> ;
+-----+
| Tables_in_sales_management |
+-----+
| product_master              |
| salesman_master               |
+-----+
2 rows in set (0.00 sec)
```

8. Exercise on renaming the table :

- a. Change the name of the SALESMAN_MASTER table to SALESMAN_MAST

```
mysql> RENAME TABLE SALESMAN_MASTER TO SALESMAN_MAST;
Query OK, 0 rows affected (0.04 sec)

mysql> show tables;
+-----+
| Tables_in_sales_management |
+-----+
| product_master              |
| salesman_mast                |
+-----+
2 rows in set (0.00 sec)
```