20BCS042 | MOHD ADIL

ASSIGNMENT 2

Viewing The Existing Databases, Switching to the Desired Database:

Using 20BCS042 database and CREATING tables:

Creating Client Master Table:

```
mysql> CREATE TABLE Client_Master
    -> (ClientNo VARCHAR(6),
    -> Name VARCHAR(20),
    -> Address1 VARCHAR(30),
    -> Address2 VARCHAR(30),
    -> City VARCHAR(15),
    -> Pincode INT,
    -> State VARCHAR(15),
    -> BalDue INT(10));
Query OK, 0 rows affected, 1 warning (0.04 sec)
```

Creating Product Master Table:

```
mysql> CREATE TABLE Product_Master
   -> (ProductNo VARCHAR(6),
   -> ProductName VARCHAR(15),
   -> Quantity INT(8),
   -> Piece VARCHAR(10),
   -> QtyOnHand INT(8),
   -> Tax INT(8),
   -> CostPrice INT(8),
   -> SalePrice INT(8));
Query OK, 0 rows affected, 5 warnings (0.02 sec)
```

Inserting Values in Client Master Table and Product Master Table:

```
mysql> INSERT INTO Client_Master VALUES
    -> ('C00001', 'Ivan Bayross', 'Address1', 'Address2', 'Mumbai', 40001, 'Maharashtra', 15000),
    -> ('C00002', 'Mamta Muzumdar', 'Address1', 'Address2', 'Madras', 780001, 'Tamil Nadu', 0),
    -> ('C00003', 'Chhaya Bankar', 'Address1', 'Address2', 'Mumbai', 400057, 'Maharashtra', 5000),
    -> ('C00004', 'Ashwni Joshi', 'Address1', 'Address2', 'Bangalore', 560001, 'Karnataka', 0),
    -> ('C00005', 'Hansei Colaco', 'Address2', 'Address2', 'Mumbai', 400060, 'Maharashtra', 2000),
    -> ('C00006', 'Deepak Sharma', 'Address1', 'Address2', 'Mangalore', 560050, 'Karnataka', 0);
Query OK, 6 rows affected (0.01 sec)
Records: 6 Duplicates: 0 Warnings: 0
mysql> INSERT INTO Product_Master VALUES
    -> ('P00001', 'T-Shirt', 5, 'Piece', 200, 50, 350, 250),
    -> ('P0345', 'Shirts', 6, 'Piece', 150, 50, 500, 350),
    -> ('P06734', 'Cotton Jeans', 5, 'Piece', 100, 20, 600, 450),
```

```
-> ('P07865', 'Jeans', 5, 'Piece', 100, 20, 750, 500),
-> ('P07885', 'Trousers', 2, 'Piece', 150, 50, 850, 550),
-> ('P07868', 'Pull Overs', 2, 'Piece', 150, 50, 850, 550),
-> ('P07868', 'Denim Shirts', 4, 'Piece', 100, 40, 350, 250),
-> ('P07898', 'Lycra Tops', 5, 'Piece', 70, 30, 300, 175),
-> ('P07868', 'Skirts', 5, 'Piece', 75, 30, 450, 300);

Query OK, 9 rows affected (0.01 sec)

Records: 9 Duplicates: 0 Warnings: 0
```

Exercise :3 Exercise on retrieving Data

a. Find Out the Name of all the Clients.

b. Retrieve the entire contents of the Client Master Table:

mysql> seled	ct * from client_r	master;					
ClientNo	Name	Address1	Address2	City	Pincode	State	BalDue
C00001 C00002 C00003 C00004 C00005 C00006	Ivan Bayross Mamta Muzumdar Chhaya Bankar Ashwni Joshi Hansei Colaco Deepak Sharma	Address1 Address1 Address1 Address1 Address2 Address1	Address2 Address2 Address2 Address2 Address2 Address2	Mumbai Madras Mumbai Bangalore Mumbai Mangalore	400001 780001 400057 560001 400060 560050	Maharashtra Tamil Nadu Maharashtra Karnataka Maharashtra Karnataka	15000 0 5000 0 2000 0
+ 6 rows in se	et (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;
                  City
                               State
 Name
                               Maharashtra
 Ivan Bayross
                   Mumbai
                               Tamil Nadu
 Mamta Muzumdar
                   Madras
 Chhaya Bankar
                   Mumbai
                               Maharashtra
 Ashwni Joshi
                   Bangalore | Karnataka
 Hansei Colaco
                   Bangalore | Karnataka
 Deepak Sharma
                   Mangalore
                               Karnataka
 rows in set (0.00 sec)
```

d. List the various products available from the Product Master Table:

e. List all clients who live in Mumbai:

```
mysql> select * from Client_master
   -> where city='Mumbai';
 ClientNo
            Name
                            Address1
                                       Address2
                                                City
                                                           Pincode
                                                                     State
                                                                                   BalDue
            Ivan Bayross
                            Address1
                                       Address2
                                                                     Maharashtra
 C00001
                                                  Mumbai
                                                            400001
                                                                                    15000
            Chhaya Bankar
                                                                     Maharashtra
 C00003
                            Address1
                                       Address2
                                                  Mumbai
                                                            400057
                                                                                     5000
            Hansei Colaco
                                                                     Maharashtra
 C00005
                            Address2
                                       Address2
                                                  Mumbai
                                                            400060
                                                                                     2000
 rows in set (0.00 sec)
```

Exercise 4: Exercise on updating the records in the table:

a. Change the city of Client No 'C00005' to 'Bangalore'.

```
mysql> update client master set City='Bangalore', Pincode=560002, State='Karnataka'
   -> where ClientNo='C00005';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> select * from Client_master;
 ClientNo
                             Address1
                                        Address2 | City
                                                                Pincode | State
                                                                                        BalDue
 C00001
            Ivan Bayross
                             Address1
                                         Address2
                                                   Mumbai
                                                                 400001
                                                                          Maharashtra
                                                                                         15000
 C00002
                                                                         Tamil Nadu
            Mamta Muzumdar
                             Address1
                                        Address2
                                                   Madras
                                                                 780001
                                                                                             0
                                        Address2
 C00003
            Chhava Bankar
                             Address1
                                                   Mumbai
                                                                 400057
                                                                         Maharashtra
                                                                                          5000
            Ashwni Joshi
 C00004
                             Address1
                                        Address2
                                                   Bangalore
                                                                 560001
                                                                          Karnataka
                                                                                             0
            Hansei Colaco
                            Address2 | Address2 | Bangalore
 C00005
                                                                 560002
                                                                         Karnataka
                                                                                          2000
 C00006
            Deepak Sharma
                             Address1 | Address2 | Mangalore
                                                                 560050
                                                                         Karnataka
                                                                                             0
 rows in set (0.00 sec)
```

b. Change the Bal Due of Client No C0001 to Rs. 1000.

```
mysql> update client master set BalDue=1000
    -> where ClientNo='C00001';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> select * from Client master;
  ClientNo
                              Address1
                                        Address2 | City
                                                                Pincode
                                                                                        BalDue
            Name
                                                                          State
            Ivan Bayross
                                         Address2
                                                    Mumbai
                                                                          Maharashtra
  C00001
                              Address1
                                                                 400001
                                                                                          1000
  C00002
            Mamta Muzumdar
                             Address1
                                        Address2
                                                    Madras
                                                                 780001
                                                                          Tamil Nadu
                                                                                              0
  C00003
                                        Address2
                                                    Mumbai
                                                                          Maharashtra
             Chhaya Bankar
                              Address1
                                                                 400057
                                                                                           5000
  C00004
            Ashwni Joshi
                             Address1 | Address2 |
                                                    Bangalore
                                                                 560001
                                                                          Karnataka
                                                                                             0
  C00005
            Hansei Colaco
                             Address2 | Address2 |
                                                    Bangalore
                                                                 560002
                                                                          Karnataka
                                                                                           2000
  C00006
            Deepak Sharma
                              Address1
                                        Address2
                                                    Mangalore
                                                                 560050
                                                                          Karnataka
                                                                                             0
 rows in set (0.00 sec)
```

c. Change the Cost Price of Trousers to Rs. 950.

```
mysql> update product master set costPrice=950
   -> where ProductName='Trousers';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> select * from product master;
                            Quantity | Piece | QtyOnHand | Tax
             ProductName
                                                                  CostPrice
 ProductNo
                                                                              SalePrice
 P00001
             T-Shirt
                                       Piece
                                                     200
                                                             50
                                                                        350
                                                                                    250
                                       Piece
 P0345
             Shirts
                                                     150
                                                             50
                                                                        500
                                                                                    350
 P06734
             Cotton Jeans
                                       Piece
                                                                                    450
                                                     100
                                                             20
                                                                        600
 P07865
                                       Piece
             Jeans
                                                     100
                                                             20
                                                                        750
                                                                                    500
             Trousers
                                   2
                                       Piece
 P07885
                                                     150
                                                             50
                                                                        950
                                                                                    550
 P07868
             Pull Overs
                                   2
                                       Piece
                                                             50
                                                                                    550
                                                     150
                                                                        850
 P07868
             Denim Shirts
                                       Piece
                                                             40
                                                                                    250
                                                     100
                                                                        350
            Lycra Tops
 P07898
                                       Piece
                                                      70
                                                             30
                                                                        300
                                                                                    175
 P07868
             Skirts
                                       Piece
                                                      75
                                                             30
                                                                        450
                                                                                    300
 rows in set (0.00 sec)
```

Exercise 5: Deleting the records in the table.

a. Delete all products from Product_Master where the QtyOnHand is equal to 100.

ProductNo	ProductName	Quantity	Piece	QtyOnHand	Tax	CostPrice	SalePrice
P00001	T-Shirt	 5	Piece	200	 50	350	250
P0345	Shirts	6	Piece	150	50	500	350
P06734	Cotton Jeans	5	Piece	100	20	600	450
P07865	Jeans	5	Piece	100	20	750	500
P07885	Trousers	2	Piece	150	50	950	550
P07868	Pull Overs	2	Piece	150	50	850	550
P07868	Denim Shirts	4	Piece	100	40	350	250
P07898	Lycra Tops	5	Piece	70	30	300	175
P07868	Skirts	5	Piece	75	30	450	300
rows in se	t (0.02 sec) from product_ rows affected (master wher	+	÷	+	+	+
rows in ser	t (0.02 sec) e from product_	master wher 0.01 sec)	+	÷	+	+	+
rows in ser	t (0.02 sec) from product_ rows affected (master wher 0.01 sec) t_master;	- e QtyOnH	+	· 	÷	÷
rows in services of the contract of the contra	t (0.02 sec) f (0.02 sec) from product_ rows affected (from product_ t * from product_	master wher 0.01 sec) t_master;	- e QtyOnH	+	· 	÷	÷
rows in services of the control of t	t (0.02 sec) from product_ rows affected (t * from product +	master wher 0.01 sec) t_master; + Quantity	e QtyOnF	land=100;	+ Tax		SalePrice
rows in service of the control of th	t (0.02 sec) from product_ rows affected (* from product ++ ProductName	master wher 0.01 sec) t_master;+ Quantity	e QtyOnH	land=100; 	Tax	+ CostPrice	SalePrice
rows in service of the control of th	t (0.02 sec) from product_ rows affected (t * from product 	master wher 0.01 sec) t_master; + Quantity + 5 6	e QtyOnF Piece Piece Piece	+	+ Tax + 50	+ CostPrice + 350 500	SalePrice 250 350
rows in service of the control of th	t (0.02 sec) from product_ rows affected (* from product++ ProductName T-Shirt Shirts Trousers	master wher 0.01 sec) t_master; + Quantity + 5 6 2	e QtyOnH Piece Piece Piece Piece	dand=100; QtyOnHand 200 150	Tax 50 50	CostPrice 350 500 950	SalePrice 250 350

b. Delete from Client where the column state ='Maharashtra'.

```
mysql> select * from client_master;
                                                     City
 ClientNo
                                         Address2
                                                                 Pincode
                                                                           State
                                                                                          BalDue
                              Address1
 C00001
             Ivan Bayross
                              Address1
                                          Address2
                                                     Mumbai
                                                                  400001
                                                                           Maharashtra
                                                                                            1000
 C00002
             Mamta Muzumdar
                              Address1
                                         Address2
                                                     Madras
                                                                           Tamil Nadu
                                                                  780001
 C00003
             Chhaya Bankar
                              Address1
                                         Address2
                                                     Mumbai
                                                                  400057
                                                                           Maharashtra
                                                                                            5000
             Ashwni Joshi
                                         Address2
                                                     Bangalore
                                                                           Karnataka
  C00004
                              Address1
                                                                  560001
            Hansei Colaco
                                                     Bangalore
 C00005
                              Address2
                                         Address2
                                                                           Karnataka
                                                                  560002
                                                                                            2000
 C00006
             Deepak Sharma
                              Address1
                                         Address2
                                                     Mangalore
                                                                           Karnataka
                                                                  560050
                                                                                               0
 rows in set (0.00 sec)
mysql> delete from client master where State="Maharashtra";
Query OK, 2 rows affected (0.01 sec)
mysql> select * from client_master;
 ClientNo
                                         Address2 City
                                                                                         BalDue
             Name
                              Address1
                                                                 Pincode
                                                                           State
 C00002
             Mamta Muzumdar
                              Address1
                                         Address2
                                                     Madras
                                                                  780001
                                                                           Tamil Nadu
                                                                                              0
             Ashwni Joshi
 C00004
                              Address1
                                         Address2
                                                     Bangalore
                                                                  560001
                                                                           Karnataka
                                                                                              0
 C00005
            Hansei Colaco
                              Address2
                                         Address2
                                                     Bangalore
                                                                  560002
                                                                           Karnataka
                                                                                           2000
             Deepak Sharma
                                                     Mangalore
  C00006
                              Address1
                                         Address2
                                                                  560050
                                                                           Karnataka
 rows in set (0.00 sec)
```

Exercise 6: 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 INT(10);
Query OK, 0 rows affected, 1 warning (0.05 sec)
Records: 0 Duplicates: 0 Warnings: 1
mysql> select * from client_master;
 ClientNo |
           Name
                             Address1
                                        Address2 | City
                                                              Pincode
                                                                                     BalDue
                                                                                              Telephone
                                                                        State
 C00002
            Mamta Muzumdar
                                                  Madras
                                                                780001
                                                                        Tamil Nadu
                             Address1
                                        Address2
                                                                                          0
                                                                                                   NULL
 C00004
            Ashwni Joshi
                             Address1
                                        Address2
                                                   Bangalore
                                                                560001
                                                                        Karnataka
                                                                                          0
                                                                                                   NULL
 C00005
            Hansei Colaco
                             Address2
                                        Address2
                                                   Bangalore
                                                                        Karnataka
                                                                560002
                                                                                       2000
                                                                                                   NULL
 C00006
            Deepak Sharma
                             Address1
                                        Address2
                                                   Mangalore
                                                                560050
                                                                        Karnataka
                                                                                                   NULL
                                                                                          0
 rows in set (0.00 sec)
```

b. Change the size of Sale Price column Product_Master to 10,2.

```
mysql> describe product master;
 Field
                             Null | Key | Default | Extra
               Type
               varchar(6)
 ProductNo
                             YES
                                          NULL
 ProductName
               varchar(15)
                                          NULL
                             YES
 Quantity
               int
                             YES
                                          NULL
 Piece
               varchar(10)
                                          NULL
                             YES
               int
                                          NULL
 QtyOnHand
                             YES
 Tax
               int
                             YES
                                          NULL
 CostPrice
                             YES
                                          NULL
               int
 SalePrice
                             YES
               int
                                          NULL
8 rows in set (0.04 sec)
mysql> ALTER TABLE product master
    -> MODIFY COLUMN SalePrice DECIMAL(10,2);
Query OK, 6 rows affected (0.10 sec)
Records: 6 Duplicates: 0 Warnings: 0
mysql> describe product_master;
                               Null |
                                      Key | Default | Extra
 Field
               Type
 ProductNo
               varchar(6)
                               YES
                                            NULL
 ProductName
               varchar(15)
                                            NULL
                               YES
 Quantity
               int
                               YES
                                            NULL
 Piece
               varchar(10)
                               YES
                                            NULL
 QtyOnHand
               int
                               YES
                                            NULL
               int
 Tax
                               YES
                                            NULL
 CostPrice
               int
                               YES
                                            NULL
 SalePrice
               decimal(10,2)
                               YES
                                            NULL
 rows in set (0.00 sec)
```

Exercise 7: Exercise on deleting the table structure.

a) Destroy table Client_Master along with its data.

```
mysql> show tables;
 Tables_in_20bcs042
 client_master
 department
 employee
 product_master
 rows in set (0.00 sec)
mysql> DROP TABLE client_master;
Query OK, 0 rows affected (0.01 sec)
mysql> show tables;
 Tables_in_20bcs042
 department
 employee
 product_master
3 rows in set (0.01 sec)
```