VIT®
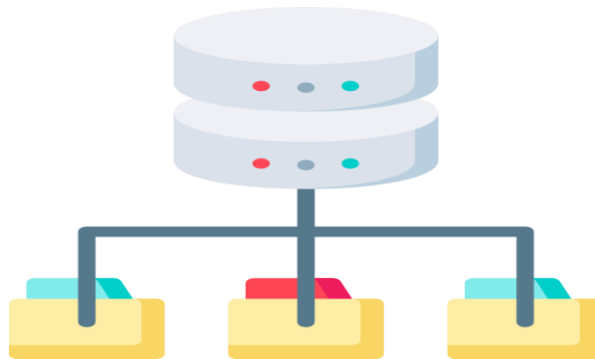**Vellore Institute of Technology**
(Deemed to be University under section 3 of UGC Act, 1956)

LAB REPORT

CSE2004 – DATABASE MANAGEMENT SYSTEMS

(B.Tech. COMPUTER SCIENCE AND ENGINEERING)

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ASSIGNMENT – 1

QUESTION – 1

Create the tables described below:

Table Name: Client_Master

Column Name	DataType
Clientno	Varchar2(6)
Name	Varchar2(20)
Address	Varchar2(30)
City	Varchar2(10)
Pincode	Number(8)
State	Varchar2(15)
Baldue	Number(10,2)

Table Name: Product_Master

Column Name	DataType
Productno	Varchar2(6)
Description	Varchar2(15)
Um(Unitmeasure)	Varchar2(10)
QOH(Qty on hand)	Number(10)
Reorderlvl	Number(5)
Sellprice	Number(8,2)
Costprice	Number(8,2)

QUERY

```sql
-- creating Client_Master table
CREATE TABLE Client_Master (
    clientno VARCHAR2(6),
    name VARCHAR2(20),
    address VARCHAR2(30),
    city VARCHAR2(10),
    pincode NUMBER(8),
    state VARCHAR2(15),
    baldue NUMBER(10, 2)
);

-- creating Product_Master table
CREATE TABLE Product_Master (
    productno VARCHAR(6),
    description VARCHAR(15),
    um VARCHAR2(10),
    QOH NUMBER(10),
    reorderlvl NUMBER(5),
    sellprice NUMBER(8, 2),
    costprice NUMBER(8, 2)
);
```

RESULT

```
SQL> CREATE TABLE Client_Master (
  2         clientno VARCHAR2(6),
  3         name VARCHAR2(20),
  4         address VARCHAR2(30),
  5         city VARCHAR2(10),
  6         pincode NUMBER(8),
  7         state VARCHAR2(15),
  8         baldue NUMBER(10, 2)
  9  );

Table created.

SQL> CREATE TABLE Product_Master (
  2         productno VARCHAR(6),
  3         description VARCHAR(15),
  4         um VARCHAR2(10),
  5         QOH NUMBER(10),
  6         reorderlvl NUMBER(5),
  7         sellprice NUMBER(8, 2),
  8         costprice NUMBER(8, 2)
  9  );

Table created.
```

QUESTION – 2

Insert the following data into their respective tables:

a) Data for **Client_Master** table

Clientno	Name	Address	City	Pincode	State	Baldue
C00001	Asha	A/14, worli	Mumbai	400054	Maharashtra	15000
C00002	Lakshmi	65, Nariman	Bangalore	560001	Karnataka	0
C00003	Puja	P-76, Bandra	Mumbai	400002	Maharashtra	10000
C00004	Shankar	A/6, Juhu	Mangalore	400044	Karnataka	5000
C00005	Deepak	68, TNagar	Chennai	6320018	Tamilnadu	0

b) Data for **Product_Master** table

Productno	Description	Um	QOH	Reorderlvl	Sellprice	Costprice
P00001	T-Shirts	Piece	200	40	350	250
P0345	Shirts	Piece	150	50	500	350
P06744	Cotton Jeans	Piece	50	20	600	450
P0990	Chuddy	Piece	100	40	400	250
P08823	Sarries	Piece	60	50	500	300

QUERY

```
-- a. Inserting in Client Master
INSERT INTO Client_Master VALUES('C00001','Asha','A/14, worli','Mumbai',400054
,'Maharashtra',15000);
INSERT INTO Client_Master VALUES('C00002','Lakshmi','65, Nariman','Bangalore',
560001,'Karnataka',0);
INSERT INTO Client_Master VALUES('C00003','Puja','P-
76, Bandra','Mumbai',400002,'Maharashtra',10000);
INSERT INTO Client_Master VALUES('C00004','Shankar','A/6, Juhu','Mangalore',40
0044,'Karnataka',5000);
INSERT INTO Client_Master VALUES('C00005','Deepak','68, TNagar','Chennai',6320
018,'Tamilnadu',0);

-- b. Inserting in Product Master
INSERT INTO Product_Master VALUES('P00001','T-Shirts','Piece',200,40,350,250);
INSERT INTO Product_Master VALUES('P0345','Shirts','Piece',150,50,500,350);
INSERT INTO Product_Master VALUES('P06744','Cotton Jeans','Piece',50,20,600,45
0);
INSERT INTO Product_Master VALUES('P0990','Chuddy','Piece',100,40,400,250);
INSERT INTO Product_Master VALUES('P08823','Sarries','Piece',60,50,500,300);
```

RESULT

```
SQL> INSERT INTO Client_Master VALUES('C00001','Asha','A/14, worli','Mumbai',400054,'Maharashtra',15000);
1 row created.
SQL> INSERT INTO Client_Master VALUES('C00002','Lakshmi','65, Nariman','Bangalore',560001,'Karnataka',0);
1 row created.
SQL> INSERT INTO Client_Master VALUES('C00003','Puja','P-76, Bandra','Mumbai',400002,'Maharashtra',10000);
1 row created.
SQL> INSERT INTO Client_Master VALUES('C00004','Shankar','A/6, Juhu','Mangalore',400044,'Karnataka',5000);
1 row created.
SQL> INSERT INTO Client_Master VALUES('C00005','Deepak','68, TNagar','Chennai',6320018,'Tamilnadu',0);
1 row created.
SQL> INSERT INTO Product_Master VALUES('P00001','T-Shirts','Piece',200,40,350,250);
1 row created.
SQL> INSERT INTO Product_Master VALUES('P0345','Shirts','Piece',150,50,500,350);
1 row created.
SQL> INSERT INTO Product_Master VALUES('P06744','Cotton Jeans','Piece',50,20,600,450);
1 row created.
SQL> INSERT INTO Product_Master VALUES('P0990','Chuddy','Piece',100,40,400,250);
1 row created.
SQL> INSERT INTO Product_Master VALUES('P08823','Sarries','Piece',60,50,500,300);
1 row created.
```

QUESTION – 3

Retrieving records from a table

a) Find out the names of all the clients

b) Retrieve the entire contents of the Client_Master table

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

d) List the various products available from the Product_Master table.

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

QUERY

```sql
-- a. Find out the names of all the clients
SELECT name FROM Client_Master;

-- b. Retrieve the entire contents of the Client_Master table
SELECT * FROM Client_Master;

-- c. Retrieve the list of names, city and the state of all the clients
SELECT name, city, state FROM Client_Master;

-- d. List the various products available from the Product_Master table.
SELECT description FROM Product_Master;

-- e. List all the clients who are located in Mumbai.
SELECT * FROM Client_Master WHERE city = 'Mumbai';
```

RESULT

```
SQL> SELECT name FROM Client_Master;

NAME
--------------------
Asha
Lakshmi
Puja
Shankar
Deepak

SQL> SELECT * FROM Client_Master;

CLIENT NAME                   ADDRESS                        CITY        PINCODE
------ -------------------- ---------------------------- ---------- ----------
STATE            BALDUE
--------------- ----------
C00001 Asha                   A/14, worli                    Mumbai      400054
Maharashtra        15000

C00002 Lakshmi                65, Nariman                    Bangalore   560001
Karnataka              0

C00003 Puja                   P-76, Bandra                   Mumbai      400002
Maharashtra        10000


CLIENT NAME                   ADDRESS                        CITY        PINCODE
------ -------------------- ---------------------------- ---------- ----------
STATE            BALDUE
--------------- ----------
C00004 Shankar               A/6, Juhu                      Mangalore   400044
Karnataka           5000

C00005 Deepak                68, TNagar                     Chennai     6320018
Tamilnadu              0


SQL> SELECT name, city, state FROM Client_Master;

NAME                 CITY       STATE
-------------------- ---------- ---------------
Asha                 Mumbai     Maharashtra
Lakshmi              Bangalore  Karnataka
Puja                 Mumbai     Maharashtra
Shankar              Mangalore  Karnataka
Deepak               Chennai    Tamilnadu

SQL> SELECT description FROM Product_Master;

DESCRIPTION
---------------
T-Shirts
Shirts
Cotton Jeans
Chuddy
Sarries

SQL> SELECT * FROM Client_Master WHERE city = 'Mumbai';

CLIENT NAME                   ADDRESS                        CITY        PINCODE
------ -------------------- ---------------------------- ---------- ----------
STATE            BALDUE
--------------- ----------
C00001 Asha                   A/14, worli                    Mumbai      400054
Maharashtra        15000

C00003 Puja                   P-76, Bandra                   Mumbai      400002
Maharashtra        10000
```

QUESTION – 4

Updating records in a table

a) Change the City of Clientno 'C00001' to 'Chennai'

b) Change the Baldue of Clientno 'C00005' to Rs.1000

c) Change the cost price of 'shirts' to Rs. 400

d) Change the QOH of the 'T-shirts' to 150

QUERY

```sql
-- a. Change the City of Clientno 'C00001' to 'Chennai'
UPDATE Client_Master SET city = 'Chennai' WHERE clientno = 'C00001';

-- b. Change the Baldue of Clientno 'C00005' to Rs.1000
UPDATE Client_Master SET baldue = 1000 WHERE clientno = 'C00005';

-- c. Change the cost price of 'shirts' to Rs. 400
UPDATE Product_Master SET costprice = 400 WHERE description = 'Shirts';

--d. Change the QOH of the 'T-shirts' to 150
UPDATE Product_Master SET QOH = 150 WHERE description = 'T-Shirts';
```

RESULT

```
SQL> UPDATE Client_Master SET city = 'Chennai' WHERE clientno = 'C00001';
1 row updated.
SQL> UPDATE Client_Master SET baldue = 1000 WHERE clientno = 'C00005';
1 row updated.
SQL> UPDATE Product_Master SET costprice = 400 WHERE description = 'Shirts';
1 row updated.
SQL> UPDATE Product_Master SET QOH = 150 WHERE description = 'T-Shirts';
1 row updated.
```

QUESTION – 5

Deleting records in a table

a) Delete all products from Product_Master where the quantity on hand is equal to 100

b) Delete from Client_Master where the column state holds the value "Tamilnadu"

c) Delete all clients from Client_Master where the Baldue is equal to 0.

QUERY

```sql
-- a. Delete all products from Product_Master
--where the quantity on hand is equal to 100
DELETE FROM Product_Master WHERE QOH = 100;

-- b. Delete from Client_Master where the column
-- state holds the value "Tamilnadu"
DELETE FROM Client_Master WHERE state = 'Tamilnadu';

-- c. Delete all clients from Client_Master where the
--Baldue is equal to 0.
DELETE FROM Client_Master WHERE baldue = 0;
```

RESULT

```
SQL> DELETE FROM Product_Master WHERE QOH = 100;

1 row deleted.

SQL> DELETE FROM Client_Master WHERE state = 'Tamilnadu';

1 row deleted.

SQL> DELETE FROM Client_Master WHERE baldue = 0;

1 row deleted.
```

QUESTION – 6

Altering the table structure

a) Add a column call Profitpercent of datatype number10,2 to the Product_Master

b) Change the size of sellprice column in Product_Master to 10,2

c) Change the name of the column UM to UnitMeasure in Product_Master

d) Drop the column UnitMeasure.

e) Drop the table Client_Master along with its data.

QUERY

```
-- a. Add a column call Profitpercent of datatype number10,2
-- to the Product_Master
ALTER TABLE Product_Master ADD (profitpercent NUMBER(10, 2));

-- b. Change the size of sellprice column in Product_Master to 10,2
ALTER TABLE Product_Master MODIFY (sellprice NUMBER(10, 2));

-- c.  Change the name of the column UM to UnitMeasure in Product_Master
ALTER TABLE Product_Master RENAME COLUMN um TO UnitMeasure;

-- d. Drop the column UnitMeasure.
ALTER TABLE Product_Master DROP COLUMN UnitMeasure;

-- e. Drop the table Client_Master along with its data
DROP TABLE Client_Master;
```

RESULT

```
SQL> ALTER TABLE Product_Master ADD (profitpercent NUMBER(10, 2));
Table altered.
SQL> ALTER TABLE Product_Master MODIFY (sellprice NUMBER(10, 2));
Table altered.
SQL> ALTER TABLE Product_Master RENAME COLUMN um TO UnitMeasure;
Table altered.
SQL> ALTER TABLE Product_Master DROP COLUMN UnitMeasure;
Table altered.
SQL> DROP TABLE Client_Master;
Table dropped.
```