NAME - KIshanlal Choudhary
ROLL NO - 31114
CLASS - TE 1
SUBJECT - DBMS
DATE - 07/08/23
Assignment No - 03 B

----------------------------START----------------------------------

SHOW DATABASES;

```
+--------------------+
| Database           |
+--------------------+
| 31114_db           |
| information_schema |
+--------------------+
```

USE 31114_db;

CREATE TABLE Training_2B (T_id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
Tcompany_name VARCHAR(255), T_fee INT, T_date DATE);

ALTER TABLE Training_2B MODIFY T_date INT;

CREATE TABLE Placement_Drive_2B (Drive_id INT NOT NULL AUTO_INCREMENT PRIMARY
KEY, Company_name VARCHAR(255), Package INT, Location VARCHAR(255));

CREATE TABLE Student_2B (S_id INT NOT NULL AUTO_INCREMENT PRIMARY KEY, Drive_id
INT, S_name VARCHAR(255), CGPA FLOAT, S_branch VARCHAR(255), FOREIGN KEY
(Drive_id) REFERENCES Placement_Drive_2B(Drive_id) ON DELETE CASCADE);

SHOW TABLES;

```
+--------------------+
| Tables_in_31114_db |
+--------------------+
| Placement_Drive_2B |
| Student_2B         |
| Training_2B        |
+--------------------+
```

MariaDB [31114_db]> SELECT * FROM Student_2B;
```
+------+----------+-----------+------+----------+------+
| S_id | Drive_id | S_name    | CGPA | S_branch | T_id |
+------+----------+-----------+------+----------+------+
|    1 |    21245 | Maitreyee |  9.5 | Comp     |  101 |
|    2 |    21246 | Kartiki   |  9.4 | Comp     |  102 |
|    4 |    21248 | Parag     |  9.5 | Comp     |  104 |
|    5 |    21249 | Divya     |  9.5 | Comp     |  105 |
|    6 |    21250 | Vedant    |  9.7 | Comp     |  106 |
|    7 |    21251 | Anushka   |  9.3 | Comp     |  107 |
|    8 |    21252 | Bhakti    |  9.7 | Comp     |  108 |
+------+----------+-----------+------+----------+------+
7 rows in set (0.001 sec)
```

MariaDB [31114_db]> SELECT * FROM Placement_Drive_2B;
```
+----------+--------------+---------+-----------+
| Drive_id | Company_name | Package | Location  |
+----------+--------------+---------+-----------+
|    21245 | DELL         |  200000 | Pune      |
|    21246 | APPLE        |  400000 | Mumbai    |
|    21247 | BARCLAYS     |  300000 | Bengaluru |
```

```
|    21248 | PFIZER       | 400000 | Hyderabad |
|    21249 | INFOSYS      | 450000 | Mumbai    |
|    21250 | DB           | 540000 | Pune      |
|    21251 | PHONEPE      | 340000 | Chennai   |
|    21252 | SAMSUNG      | 650000 | Delhi     |
|    21253 | FACEBOOK     | 250000 | Delhi     |
+----------+--------------+--------+-----------+
9 rows in set (0.001 sec)

MariaDB [31114_db]> SELECT * FROM Training_2B;
+------+---------------+-------+--------+
| T_id | Tcompany_name | T_fee | T_date |
+------+---------------+-------+--------+
|  100 | INFOSYS       | 11500 |   2021 |
|  101 | VERZEO        | 10500 |   2020 |
|  102 | GOOGLE        | 23000 |   2021 |
|  103 | MERINO        |  5000 |   2022 |
|  104 | COGNIZANT     |  7600 |   2020 |
|  105 | KODEIT        |  7521 |   2021 |
|  106 | CUMMINS       |  4300 |   2022 |
|  107 | SIEMENS       | 11270 |   2021 |
|  108 | MASTERCARD    |  6500 |   2020 |
|  109 | APPLE         |  7475 |   2021 |
+------+---------------+-------+--------+
10 rows in set (0.001 sec)

Query - 1

MariaDB [31114_db]> SELECT * FROM Student_2B NATURAL JOIN Placement_Drive_2B;
+----------+------+-----------+------+----------+------+--------------+---------
+-----------+
| Drive_id | S_id | S_name    | CGPA | S_branch | T_id | Company_name | Package
| Location  |
+----------+------+-----------+------+----------+------+--------------+---------
+-----------+
|    21245 |    1 | Maitreyee |  9.5 | Comp     |  101 | DELL         | 200000
| Pune      |
|    21246 |    2 | Kartiki   |  9.4 | Comp     |  102 | APPLE        | 400000
| Mumbai    |
|    21248 |    4 | Parag     |  9.5 | Comp     |  104 | PFIZER       | 400000
| Hyderabad |
|    21249 |    5 | Divya     |  9.5 | Comp     |  105 | INFOSYS      | 450000
| Mumbai    |
|    21250 |    6 | Vedant    |  9.7 | Comp     |  106 | DB           | 540000
| Pune      |
|    21251 |    7 | Anushka   |  9.3 | Comp     |  107 | PHONEPE      | 340000
| Chennai   |
|    21252 |    8 | Bhakti    |  9.7 | Comp     |  108 | SAMSUNG      | 650000
| Delhi     |
+----------+------+-----------+------+----------+------+--------------+---------
+-----------+
7 rows in set (0.001 sec)

Query - 2

MariaDB [31114_db]> SELECT s.S_name, p.Company_name FROM Student_2B s INNER JOIN
Placement_Drive_2B p using(Drive_id);
+-----------+--------------+
| S_name    | Company_name |
+-----------+--------------+
| Maitreyee | DELL         |
| Kartiki   | APPLE        |
| Parag     | PFIZER       |
| Divya     | INFOSYS      |
```

```
| Vedant    | DB          |
| Anushka   | PHONEPE     |
| Bhakti    | SAMSUNG     |
+-----------+-------------+
7 rows in set (0.001 sec)
```

Query - 3

```
MariaDB [31114_db]> SELECT s.S_name, s.S_branch FROM Student_2B s RIGHT JOIN
Placement_Drive_2B p using(Drive_id) WHERE p.Package = 400000;
+---------+----------+
| S_name  | S_branch |
+---------+----------+
| Kartiki | Comp     |
| Parag   | Comp     |
+---------+----------+
2 rows in set (0.562 sec)
```

Query - 4

```
MariaDB [31114_db]> SELECT s.S_name, p.Company_name FROM Student_2B s LEFT JOIN
Placement_Drive_2B p using(Drive_id) INNER JOIN Training_2B t using(T_id) WHERE
T_fee >
1000;
+-----------+--------------+
| S_name    | Company_name |
+-----------+--------------+
| Maitreyee | DELL         |
| Kartiki   | APPLE        |
| Parag     | PFIZER       |
| Divya     | INFOSYS      |
| Vedant    | DB           |
| Anushka   | PHONEPE      |
| Bhakti    | SAMSUNG      |
+-----------+--------------+
7 rows in set (0.001 sec)
```

Query - 5

```
MariaDB [31114_db]> SELECT t.* FROM Student_2B s INNER JOIN Training_2B t
using(T_id) WHERE s.S_name = "Anushka" AND T_date = 2021;
+------+---------------+-------+--------+
| T_id | Tcompany_name | T_fee | T_date |
+------+---------------+-------+--------+
|  107 | SIEMENS       | 11270 |   2021 |
+------+---------------+-------+--------+
1 row in set (0.001 sec)
```

Query - 6

```
MariaDB [31114_db]> SELECT count(Tcompany_name) company_count FROM Training_2B
WHERE T_date < 2021 ;
+---------------+
| company_count |
+---------------+
|             3 |
+---------------+
1 row in set (0.001 sec)
```

Query - 7

```
MariaDB [31114_db]> SELECT S_name FROM Student_2B INNER JOIN (SELECT * FROM
Placement_Drive_2B WHERE Company_name = "PHONEPE" AND Location = "Chennai") p
using(Drive_id);
```

```
+---------+
| S_name  |
+---------+
| Anushka |
+---------+
1 row in set (0.001 sec)

MariaDB [31114_db]> SELECT S_name FROM Student_2B INNER JOIN Placement_Drive_2B
p using(Drive_id) WHERE p.Company_name = "PHONEPE" AND p.Location =
"Maharashtra";
Empty set (0.001 sec)

Query - 8

MariaDB [31114_db]> SELECT S_name FROM Student_2B INNER JOIN (SELECT * FROM
Training_2B WHERE Tcompany_name = "SIEMENS" AND T_date = "2021") t using(T_id);
+---------+
| S_name  |
+---------+
| Anushka |
+---------+
1 row in set (0.001 sec)

MariaDB [31114_db]> SELECT S_name FROM Student_2B INNER JOIN (SELECT * FROM
Training_2B WHERE Tcompany_name = "Mastercard" AND T_date = "2020") t
using(T_id);
Empty set (0.001 sec)

Query - 9

MariaDB [31114_db]> CREATE VIEW Student_Information AS SELECT * FROM Student_2B
s INNER JOIN Training_2B t using(T_id);
Query OK, 0 rows affected (1.674 sec)

MariaDB [31114_db]> Select * FROM Student_Information;
+------+------+----------+-----------+------+----------+---------------+-------
+--------+
| T_id | S_id | Drive_id | S_name    | CGPA | S_branch | Tcompany_name | T_fee |
T_date |
+------+------+----------+-----------+------+----------+---------------+-------
+--------+
| 101  |   1  |    21245 | Maitreyee |  9.5 | Comp     | VERZEO        | 10500 |
2020 |
| 102  |   2  |    21246 | Kartiki   |  9.4 | Comp     | GOOGLE        | 23000 |
2021 |
| 104  |   4  |    21248 | Parag     |  9.5 | Comp     | COGNIZANT     |  7600 |
2020 |
| 105  |   5  |    21249 | Divya     |  9.5 | Comp     | KODEIT        |  7521 |
2021 |
| 106  |   6  |    21250 | Vedant    |  9.7 | Comp     | CUMMINS       |  4300 |
2022 |
| 107  |   7  |    21251 | Anushka   |  9.3 | Comp     | SIEMENS       | 11270 |
2021 |
| 108  |   8  |    21252 | Bhakti    |  9.7 | Comp     | MASTERCARD    |  6500 |
2020 |
+------+------+----------+-----------+------+----------+---------------+-------
+--------+
7 rows in set (0.002 sec)

MariaDB [31114_db]> DROP VIEW Student_Information;
Query OK, 0 rows affected (0.001 sec)

MariaDB [31114_db]> Select * FROM Student_Information;
ERROR 1146 (42S02): Table '31114_db.Student_Information' doesn't exist
```

```
Query - 10

Complex view creation -

MariaDB [31114_db]> CREATE VIEW Student_Details AS SELECT s.S_name,
p.Company_name, t.Tcompany_name FROM Student_2B s INNER JOIN Placement_Drive_2B
p using(Drive_id) INNE
Query OK, 0 rows affected (0.033 sec)

MariaDB [31114_db]> SELECT * FROM Student_Details;
+-----------+--------------+---------------+
| S_name    | Company_name | Tcompany_name |
+-----------+--------------+---------------+
| Maitreyee | DELL         | VERZEO        |
| Kartiki   | APPLE        | GOOGLE        |
| Parag     | PFIZER       | COGNIZANT     |
| Divya     | INFOSYS      | KODEIT        |
| Vedant    | DB           | CUMMINS       |
| Anushka   | PHONEPE      | SIEMENS       |
| Bhakti    | SAMSUNG      | MASTERCARD    |
+-----------+--------------+---------------+
7 rows in set (0.001 sec)

Simple view creation -

MariaDB [31114_db]> CREATE VIEW Student_data AS SELECT S_name, S_branch FROM
Student_2B WHERE S_branch = "Comp";
Query OK, 0 rows affected (0.058 sec)

MariaDB [31114_db]> SELECT * FROM Student_data;
+-----------+----------+
| S_name    | S_branch |
+-----------+----------+
| Maitreyee | Comp     |
| Kartiki   | Comp     |
| Parag     | Comp     |
| Divya     | Comp     |
| Vedant    | Comp     |
| Anushka   | Comp     |
| Bhakti    | Comp     |
+-----------+----------+
7 rows in set (0.001 sec)

Simple view update columns -

MariaDB [31114_db]> CREATE OR REPLACE VIEW Student_data AS SELECT s.S_name,
s.S_branch, s.CGPA FROM Student_2B s;
Query OK, 0 rows affected (0.025 sec)

MariaDB [31114_db]> SELECT * FROM Student_data;
+-----------+----------+------+
| S_name    | S_branch | CGPA |
+-----------+----------+------+
| Maitreyee | Comp     | 9.5  |
| Kartiki   | Comp     | 9.4  |
| Parag     | Comp     | 9.5  |
| Divya     | Comp     | 9.5  |
| Vedant    | Comp     | 9.7  |
| Anushka   | Comp     | 9.3  |
| Bhakti    | Comp     | 9.7  |
+-----------+----------+------+
7 rows in set (0.001 sec)
```

Simple view deletion -

```
MariaDB [31114_db]> DELETE FROM Student_data WHERE CGPA > 9.5;
Query OK, 2 rows affected (0.075 sec)

MariaDB [31114_db]> SELECT * FROM Student_data;
+-----------+----------+------+
| S_name    | S_branch | CGPA |
+-----------+----------+------+
| Maitreyee | Comp     |  9.5 |
| Kartiki   | Comp     |  9.4 |
| Parag     | Comp     |  9.5 |
| Divya     | Comp     |  9.5 |
| Anushka   | Comp     |  9.3 |
+-----------+----------+------+
5 rows in set (0.001 sec)
```

Simple view insertion -

```
MariaDB [31114_db]> CREATE OR REPLACE VIEW Student_data AS SELECT * FROM
Student_2B s;
Query OK, 0 rows affected (0.033 sec)

MariaDB [31114_db]> SELECT * FROM Student_data;
+------+----------+-----------+------+----------+------+
| S_id | Drive_id | S_name    | CGPA | S_branch | T_id |
+------+----------+-----------+------+----------+------+
|    1 |    21245 | Maitreyee |  9.5 | Comp     |  101 |
|    2 |    21246 | Kartiki   |  9.4 | Comp     |  102 |
|    4 |    21248 | Parag     |  9.5 | Comp     |  104 |
|    5 |    21249 | Divya     |  9.5 | Comp     |  105 |
|    7 |    21251 | Anushka   |  9.3 | Comp     |  107 |
+------+----------+-----------+------+----------+------+
5 rows in set (0.001 sec)

MariaDB [31114_db]> INSERT INTO Student_data VALUES (10, 21250, "Kishanlal",
9.8, "Comp", 106);
Query OK, 1 row affected (0.034 sec)

MariaDB [31114_db]> SELECT * FROM Student_data;
+------+----------+-----------+------+----------+------+
| S_id | Drive_id | S_name    | CGPA | S_branch | T_id |
+------+----------+-----------+------+----------+------+
|    1 |    21245 | Maitreyee |  9.5 | Comp     |  101 |
|    2 |    21246 | Kartiki   |  9.4 | Comp     |  102 |
|    4 |    21248 | Parag     |  9.5 | Comp     |  104 |
|    5 |    21249 | Divya     |  9.5 | Comp     |  105 |
|    7 |    21251 | Anushka   |  9.3 | Comp     |  107 |
|   10 |    21250 | Kishanlal |  9.8 | Comp     |  106 |
+------+----------+-----------+------+----------+------+
6 rows in set (0.001 sec)
```

Simple view updation -

```
MariaDB [31114_db]> UPDATE Student_data SET S_name = "Abhishek" WHERE s_id = 10;
Query OK, 1 row affected (0.032 sec)
Rows matched: 1  Changed: 1  Warnings: 0

MariaDB [31114_db]> SELECT * FROM Student_data;
+------+----------+-----------+------+----------+------+
| S_id | Drive_id | S_name    | CGPA | S_branch | T_id |
+------+----------+-----------+------+----------+------+
|    1 |    21245 | Maitreyee |  9.5 | Comp     |  101 |
|    2 |    21246 | Kartiki   |  9.4 | Comp     |  102 |
```

```
|    4 |    21248 | Parag     |  9.5 | Comp      |  104 |
|    5 |    21249 | Divya     |  9.5 | Comp      |  105 |
|    7 |    21251 | Anushka   |  9.3 | Comp      |  107 |
|   10 |    21250 | Abhishek  |  9.8 | Comp      |  106 |
+------+----------+-----------+------+----------+------+
6 rows in set (0.001 sec)


Simple view drop view -

MariaDB [31114_db]> DROP VIEW Student_data;
Query OK, 0 rows affected (0.001 sec)

MariaDB [31114_db]> SELECT * FROM Student_data;
ERROR 1146 (42S02): Table '31114_db.Student_data' doesn't exist


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END---------------------------------------------
```