ASSIGNMENT 3

Roll No: 31448

1. Find the Student details and Placement details using NATURAL JOIN.
SELECT * FROM Student NATURAL JOIN PlacementDrive;

```
+----------+------+------+-----------------+------+----------+------------+--------------+------------+-----------+
| Drive_id | s_id | T_id | s_name          | CGPA | s_branch | S_dob      | Pcompany_name| package    | location  |
+----------+------+------+-----------------+------+----------+------------+--------------+------------+-----------+
|        1 |   87 |  239 | Sakshi Kulkarni | 8.90 | CSE      | 2002-03-15 | Google       | 1200000.00 | Bangalore |
|        2 |   12 |  202 | Tanvi Deshmukh  | 9.10 | IT       | 2003-10-10 | Amazon       | 1100000.00 | Hyderabad |
|        2 |   17 |  202 | Harshad Joshi   | 9.30 | ECE      | 2001-12-12 | Amazon       | 1100000.00 | Hyderabad |
|        2 |  112 |  204 | Yug Mehta       | 6.90 | IT       | 2003-09-15 | Amazon       | 1100000.00 | Hyderabad |
|        3 |   13 |  203 | Yash Patil      | 7.80 | ECE      | 2001-11-20 | Microsoft    | 1150000.00 | Noida     |
|        3 |   18 |  203 | Rutuja Pawar    | 8.90 | EEE      | 2003-01-05 | Microsoft    | 1150000.00 | Noida     |
|        4 |   14 |  204 | Snehal Rane     | 8.40 | EEE      | 2002-06-25 | Accenture    |  600000.00 | Pune      |
|        4 |   19 |  204 | Nikhil Gaikwad  | 8.20 | CSE      | 2002-09-14 | Accenture    |  600000.00 | Pune      |
|        4 |   22 |  204 | jui Gaikwad     | 8.50 | CSE      | 2002-09-18 | Accenture    |  600000.00 | Pune      |
|        5 |   15 |  205 | Omkar Shinde    | 8.00 | CSE      | 2003-02-18 | IBM          |  400000.00 | Mumbai    |
|        5 |   20 |  205 | Vidya More      | 8.70 | IT       | 2001-05-09 | IBM          |  400000.00 | Mumbai    |
|        5 |   29 |  205 | Shantanu Wable  | 9.70 | ENTC     | 2001-04-09 | IBM          |  400000.00 | Mumbai    |
|        5 |   32 |  219 | Shantanu Wable  | 9.70 | ENTC     | 2001-04-09 | IBM          |  400000.00 | Mumbai    |
|        5 |   33 |  218 | Shantanu Wable  | 9.70 | ENTC     | 2001-04-09 | IBM          |  400000.00 | Mumbai    |
|        6 |   21 |  205 | Sangita Devu    | 9.00 | CSE      | 2002-04-04 | Infosys      |  450000.00 | Pune      |
|        9 |   23 |  204 | Saket Manjrekar | 8.50 | CSE      | 2003-09-18 | JP Morgan    |  500000.00 | Noida     |
|        9 |   24 |  203 | Monika Gupta    | 9.80 | IT       | 2005-09-12 | JP Morgan    |  500000.00 | Noida     |
+----------+------+------+-----------------+------+----------+------------+--------------+------------+-----------+
```

2. Find all the student details with company_name who have conducted in same drive
SELECT s.*,p.Pcompany_name FROM Student s JOIN PlacementDrive p ON p.Drive_id = s.Drive_id;

```
+------+----------+------+-----------------+------+----------+------------+---------------+
| s_id | Drive_id | T_id | s_name          | CGPA | s_branch | S_dob      | Pcompany_name |
+------+----------+------+-----------------+------+----------+------------+---------------+
|   87 |        1 |  239 | Sakshi Kulkarni | 8.90 | CSE      | 2002-03-15 | Google        |
|   12 |        2 |  202 | Tanvi Deshmukh  | 9.10 | IT       | 2003-10-10 | Amazon        |
|   17 |        2 |  202 | Harshad Joshi   | 9.30 | ECE      | 2001-12-12 | Amazon        |
|  112 |        2 |  204 | Yug Mehta       | 6.90 | IT       | 2003-09-15 | Amazon        |
|   13 |        3 |  203 | Yash Patil      | 7.80 | ECE      | 2001-11-20 | Microsoft     |
|   18 |        3 |  203 | Rutuja Pawar    | 8.90 | EEE      | 2003-01-05 | Microsoft     |
|   14 |        4 |  204 | Snehal Rane     | 8.40 | EEE      | 2002-06-25 | Accenture     |
|   19 |        4 |  204 | Nikhil Gaikwad  | 8.20 | CSE      | 2002-09-14 | Accenture     |
|   22 |        4 |  204 | jui Gaikwad     | 8.50 | CSE      | 2002-09-18 | Accenture     |
|   15 |        5 |  205 | Omkar Shinde    | 8.00 | CSE      | 2003-02-18 | IBM           |
|   20 |        5 |  205 | Vidya More      | 8.70 | IT       | 2001-05-09 | IBM           |
|   29 |        5 |  205 | Shantanu Wable  | 9.70 | ENTC     | 2001-04-09 | IBM           |
|   32 |        5 |  219 | Shantanu Wable  | 9.70 | ENTC     | 2001-04-09 | IBM           |
|   33 |        5 |  218 | Shantanu Wable  | 9.70 | ENTC     | 2001-04-09 | IBM           |
|   21 |        6 |  205 | Sangita Devu    | 9.00 | CSE      | 2002-04-04 | Infosys       |
|   23 |        9 |  204 | Saket Manjrekar | 8.50 | CSE      | 2003-09-18 | JP Morgan     |
|   24 |        9 |  203 | Monika Gupta    | 9.80 | IT       | 2005-09-12 | JP Morgan     |
+------+----------+------+-----------------+------+----------+------------+---------------+
```

3.List all the Student name and Student branch of Student having package 5 LPA
SELECT s_name,s_branch from Student s JOIN PlacementDrive p ON p.Drive_id = s.Drive_id WHERE p.package=500000;

```
+-----------------+----------+
| s_name          | s_branch |
+-----------------+----------+
| Saket Manjrekar | CSE      |
| Monika Gupta    | IT       |
+-----------------+----------+
```

4.List all the student names ,company_name having T_fee more than 20000
SELECT s_name,t.Tcompany_name FROM Student s JOIN Training t ON s.T_id=t.T_id WHERE t.T_Fee>20000;

```
+-----------------+-----------------+
| s_name          | Tcompany_name   |
+-----------------+-----------------+
| Omkar Shinde    | Skillshare      |
| Vidya More      | Skillshare      |
| Sangita Devu    | Skillshare      |
| Shantanu Wable  | Skillshare      |
+-----------------+-----------------+
```

5. Display all training details attended by "shantanu" in year 2011
SELECT t.* FROM Training t JOIN Student s ON t.t_id = s.t_id WHERE s.s_name LIKE
"Shantanu%" AND t.t_year=2011;
// i should have taken date as 2022-06-9 but i just took year, YEAR(t.t_date)=2011 my field is also
t_year instead of t_date

```
+------+-----------------+------------+--------+
| T_id | Tcompany_name   | T_Fee      | T_year |
+------+-----------------+------------+--------+
|  219 | Growup          | 10000.00   |  2011  |
|  218 | Career          |  5000.00   |  2011  |
+------+-----------------+------------+--------+
```
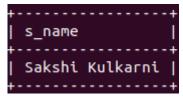
6. list the total number of companies who conduct training before 2015
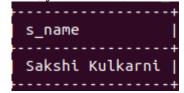SELECT COUNT(DISTINCT Tcompany_name) AS Company_count FROM Training WHERE
t_year<2015;

```
+-----------------+
| Company_count   |
+-----------------+
|              8  |
```

7. List the students name with company 'Microsoft' and location 'Thane'
SELECT s.s_name FROM Student s JOIN PlacementDrive p ON p.Drive_id=s.Drive_id WHERE
p.Pcompany_name = "Microsoft" AND p.location = "Thane";

```
+-----------------+
| s_name          |
+-----------------+
| Sakshi Kulkarni |
+-----------------+
```

8. Find the names of all Students who have joined 'Microsoft ' training in 2015 .
SELECT s.s_name FROM Student s JOIN Training t ON s.T_id = t.T_id WHERE
t.Tcompany_name = 'Microsoft' AND t.T_year = 2015;

```
+-----------------+
| s_name          |
+-----------------+
| Sakshi Kulkarni |
+-----------------+
```

9. Create a view showing the Student and Training details.
CREATE VIEW stud_training AS SELECT s.s_id,s.s_name,t.Tcompany_name,t.T_Fee FROM
Student s JOIN Training t ON s.T_id = t.T_id;
SELECT * FROM stud_training

```
+------+-----------------+-----------------+----------+
| s_id | s_name          | Tcompany_name   | T_Fee    |
+------+-----------------+-----------------+----------+
|   11 | Soham Kulkarni  | Scaler          |  5000.00 |
|   12 | Tanvi Deshmukh  | GeeksforGeeks   |  4000.00 |
|   13 | Yash Patil      | GreatLearning   |  3500.00 |
|   14 | Snehal Rane     | edX             |  6000.00 |
|   15 | Omkar Shinde    | Skillshare      | 30000.00 |
|   16 | Aishwarya Nair  | Scaler          |  5000.00 |
|   17 | Harshad Joshi   | GeeksforGeeks   |  4000.00 |
|   18 | Rutuja Pawar    | GreatLearning   |  3500.00 |
|   19 | Nikhil Gaikwad  | edX             |  6000.00 |
|   20 | Vidya More      | Skillshare      | 30000.00 |
|   21 | Sangita Devu    | Skillshare      | 30000.00 |
|   22 | jui Gaikwad     | edX             |  6000.00 |
|   23 | Saket Manjrekar | edX             |  6000.00 |
|   24 | Monika Gupta    | GreatLearning   |  3500.00 |
|   29 | Shantanu Wable  | Skillshare      | 30000.00 |
|   32 | Shantanu Wable  | Growup          | 10000.00 |
|   33 | Shantanu Wable  | Career          |  5000.00 |
|   60 | Sonali Kulkarni | Scaler          |  5000.00 |
|   87 | Sakshi Kulkarni | MicroSoft       |  5000.00 |
|  111 | Saisha Mode     | Scaler          |  5000.00 |
|  112 | Yug Mehta       | edX             |  6000.00 |
+------+-----------------+-----------------+----------+
```

10. Perform Manipulation on simple view-Insert, update, delete, drop view.

Note: inorder to manipulate view there are rule:
1. Single table(No join)
2. All not null value.
3. No complex or subquery.
CREATE:
　　　CREATE VIEW training_view AS SELECT T_id,Tcompany_name,T_Fee,T_year FROM Training;
SELECT * FROM training_view;

```
+------+---------------+----------+--------+
| T_id | Tcompany_name | T_Fee    | T_year |
+------+---------------+----------+--------+
|  101 | Manchester    |  2000.00 |  2002  |
|  102 | Skills        |  8000.00 |  2005  |
|  201 | Scaler        |  5000.00 |  2023  |
|  202 | GeeksforGeeks |  4000.00 |  2022  |
|  203 | GreatLearning |  4000.00 |  2024  |
|  204 | edX           |  6000.00 |  2023  |
|  205 | Skillshare    | 30000.00 |  2022  |
|  206 | Upskill       | 21000.00 |  2024  |
|  207 | Unstop        | 22000.00 |  2023  |
|  208 | CodeBase      | 10000.00 |  2013  |
|  209 | Skillup       | 10000.00 |  2012  |
|  218 | Career        |  5000.00 |  2011  |
|  219 | Growup        | 10000.00 |  2011  |
|  239 | MicroSoft     |  5000.00 |  2015  |
+------+---------------+----------+--------+
```

INSERT:

INSERT INTO training_view(T_id,Tcompany_name,T_Fee,T_year) VALUES
(101,'hustle',2000,2002),
(102,'liftup',8000,2005);
SELECT * FROM training_view;

```
+------+---------------+----------+--------+
| T_id | Tcompany_name | T_Fee    | T_year |
+------+---------------+----------+--------+
|  101 | Manchester    |  2000.00 |   2002 |
|  102 | Skills        |  8000.00 |   2005 |
|  182 | liftup        |  8000.00 |   2005 |
|  191 | hustle        |  2000.00 |   2002 |
|  201 | Scaler        |  5000.00 |   2023 |
|  202 | GeeksforGeeks |  4000.00 |   2022 |
|  203 | GreatLearning |  4000.00 |   2024 |
|  204 | edX           |  6000.00 |   2023 |
|  205 | Skillshare    | 30000.00 |   2022 |
|  206 | Upskill       | 21000.00 |   2024 |
|  207 | Unstop        | 22000.00 |   2023 |
|  208 | CodeBase      | 10000.00 |   2013 |
|  209 | Skillup       | 10000.00 |   2012 |
|  218 | Career        |  5000.00 |   2011 |
|  219 | Growup        | 10000.00 |   2011 |
|  239 | MicroSoft     |  5000.00 |   2015 |
+------+---------------+----------+--------+
```

UPDATE:

SELECT * FROM training_view WHERE Tcompany_name = "Scaler";

```
+------+---------------+---------+--------+
| T_id | Tcompany_name | T_Fee   | T_year |
+------+---------------+---------+--------+
|  201 | Scaler        | 5000.00 |   2023 |
+------+---------------+---------+--------+
```
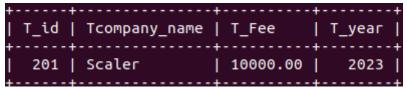
UPDATE training_view SET T_Fee=10000 WHERE Tcompany_name ="Scaler";
SELECT * FROM training_view WHERE Tcompany_name = "Scaler";

```
+------+---------------+----------+--------+
| T_id | Tcompany_name | T_Fee    | T_year |
+------+---------------+----------+--------+
|  201 | Scaler        | 10000.00 |   2023 |
+------+---------------+----------+--------+
```

DELETE:
SELECT * FROM training_view WHERE Tcompany_name = "Scaler";

```
+------+---------------+----------+--------+
| T_id | Tcompany_name | T_Fee    | T_year |
+------+---------------+----------+--------+
|  201 | Scaler        | 10000.00 |   2023 |
+------+---------------+----------+--------+
```

DELETE FROM training_view WHERE Tcompany_name = "Scaler";

SELECT * FROM training_view WHERE Tcompany_name = "Scaler";
Empty set (0.001 sec)

DROP:
DROP view training_view;
SELECT * FROM training_view;
ERROR 1146 (42S02): Table 'te31448_db.training_view' doesn't exist

JOINS
1. INNER JOINS
SELECT p.Drive_id,s_name,CGPA,s_branch,Pcompany_name,package FROM
Student s INNER JOIN PlacementDrive p ON s.Drive_id=p.Drive_id;

```
+----------+-----------------+------+----------+---------------+------------+
| Drive_id | s_name          | CGPA | s_branch | Pcompany_name | package    |
+----------+-----------------+------+----------+---------------+------------+
|        1 | Sakshi Kulkarni | 8.90 | CSE      | Google        | 1200000.00 |
|        2 | Tanvi Deshmukh  | 9.10 | IT       | Amazon        | 1100000.00 |
|        2 | Harshad Joshi   | 9.30 | ECE      | Amazon        | 1100000.00 |
|        2 | Yug Mehta       | 6.90 | IT       | Amazon        | 1100000.00 |
|        3 | Yash Patil      | 7.80 | ECE      | Microsoft     | 1150000.00 |
|        3 | Rutuja Pawar    | 8.90 | EEE      | Microsoft     | 1150000.00 |
|        4 | Snehal Rane     | 8.40 | EEE      | Accenture     |  600000.00 |
|        4 | Nikhil Gaikwad  | 8.20 | CSE      | Accenture     |  600000.00 |
|        4 | jui Gaikwad     | 8.50 | CSE      | Accenture     |  600000.00 |
|        5 | Omkar Shinde    | 8.00 | CSE      | IBM           |  400000.00 |
|        5 | Vidya More      | 8.70 | IT       | IBM           |  400000.00 |
|        5 | Shantanu Wable  | 9.70 | ENTC     | IBM           |  400000.00 |
|        5 | Shantanu Wable  | 9.70 | ENTC     | IBM           |  400000.00 |
|        5 | Shantanu Wable  | 9.70 | ENTC     | IBM           |  400000.00 |
|        6 | Sangita Devu    | 9.00 | CSE      | Infosys       |  450000.00 |
|        9 | Saket Manjrekar | 8.50 | CSE      | JP Morgan     |  500000.00 |
|        9 | Monika Gupta    | 9.80 | IT       | JP Morgan     |  500000.00 |
+----------+-----------------+------+----------+---------------+------------+
```

2. LEFT JOIN

SELECT s.s_name,p.Pcompany_name AS Placement_Company, t.Tcompany_name
AS Training_Company FROM Student s LEFT JOIN PlacementDrive p ON
s.Drive_id=p.Drive_id LEFT JOIN Training t ON s.T_id = t.T_id;

```
+-----------------+-------------------+-------------------+
| s_name          | Placement_Company | Training_Company  |
+-----------------+-------------------+-------------------+
| Tanvi Deshmukh  | Amazon            | GeeksforGeeks     |
| Yash Patil      | Microsoft         | GreatLearning     |
| Snehal Rane     | Accenture         | edX               |
| Omkar Shinde    | IBM               | Skillshare        |
| Harshad Joshi   | Amazon            | GeeksforGeeks     |
| Rutuja Pawar    | Microsoft         | GreatLearning     |
| Nikhil Gaikwad  | Accenture         | edX               |
| Vidya More      | IBM               | Skillshare        |
| Sangita Devu    | Infosys           | Skillshare        |
| jui Gaikwad     | Accenture         | edX               |
| Saket Manjrekar | JP Morgan         | edX               |
| Monika Gupta    | JP Morgan         | GreatLearning     |
| Shantanu Wable  | IBM               | Skillshare        |
| Shantanu Wable  | IBM               | Growup            |
| Shantanu Wable  | IBM               | Career            |
| Sakshi Kulkarni | Google            | MicroSoft         |
| Yug Mehta       | Amazon            | edX               |
+-----------------+-------------------+-------------------+
```

3. RIGHT JOIN

SELECT t.Tcompany_name, COUNT(s.s_id) AS Total_students FROM Student s
RIGHT JOIN Training t ON s.T_id =t.T_id GROUP BY t.Tcompany_name;

```
+---------------+----------------+
| Tcompany_name | Total_students |
+---------------+----------------+
| Career        |              1 |
| CodeBase      |              0 |
| edX           |              5 |
| GeeksforGeeks |              2 |
| GreatLearning |              3 |
| Growup        |              1 |
| hustle        |              0 |
| liftup        |              0 |
| Manchester    |              0 |
| MicroSoft     |              1 |
| Skills        |              0 |
| Skillshare    |              4 |
| Skillup       |              0 |
| Unstop        |              0 |
| Upskill       |              0 |
+---------------+----------------+
```

4.SELF JOIN

SELECT A.s_name as Student1, B.s_name AS Student2 FROM Student A, Student B
WHERE A.s_name<>B.s_name AND A.s_branch=B.s_branch AND
A.CGPA=B.CGPA ORDER BY A.s_branch;

```
+----------------+-----------------+
| Student1       | Student2        |
+----------------+-----------------+
| Saket Manjrekar | jui Gaikwad    |
| jui Gaikwad    | Saket Manjrekar |
+----------------+-----------------+
```