1. **Find the Student details and Placement details using NATURAL JOIN.**

```
mysql> SELECT * FROM Student NATURAL JOIN PlacementDrive;
+----------+------+------+-------------+------+----------+------------+-------------+---------+----------+
| Drive_id | s_id | T_id | s_name      | CGPA | s_branch | s_dob      | Pcompany_name | package | location |
+----------+------+------+-------------+------+----------+------------+-------------+---------+----------+
|        1 |    4 |    4 | Ujwal       |  8.5 | IT       | 2003-08-25 | Phone pe    |      28 | Pune     |
|        2 |    1 |    3 | Ayush       |  9.2 | Computer | 2003-01-23 | Amazon      |      44 | Banglore |
|        2 |    3 |    3 | Om          |  9.1 | Computer | 2003-06-07 | Amazon      |      44 | Banglore |
|        2 |    6 |    3 | Bhagyashree |  9.2 | IT       | 2003-09-06 | Amazon      |      44 | Banglore |
|        3 |    2 |    5 | Durvesh     |  8.9 | IT       | 2003-12-27 | Mastercard  |      16 | Mumbai   |
|        3 |    5 |    5 | Atharva     |  8.6 | Computer | 2003-07-26 | Mastercard  |      16 | Mumbai   |
|        3 |    7 |    1 | David       |  8.9 | Computer | 2003-05-15 | Mastercard  |      16 | Mumbai   |
+----------+------+------+-------------+------+----------+------------+-------------+---------+----------+
7 rows in set (0.00 sec)
```

2. Find all the student details with company_name who have conducted in same drive

SELECT s.*, pd.Pcompany_name FROM Student s LEFT JOIN (SELECT DISTINCT Drive_id, Pcompany_name FROM PlacementDrive) pd ON s.Drive_id = pd.Drive_id;

```
mysql> SELECT s.*, pd.Pcompany_name FROM Student s INNER JOIN (SELECT DISTINCT Drive_id,
+------+----------+------+-------------+------+----------+------------+---------------+
| s_id | Drive_id | T_id | s_name      | CGPA | s_branch | s_dob      | Pcompany_name |
+------+----------+------+-------------+------+----------+------------+---------------+
|    4 |        1 |    4 | Ujwal       |  8.5 | IT       | 2003-08-25 | Phone pe      |
|    1 |        2 |    3 | Ayush       |  9.2 | Computer | 2003-01-23 | Amazon        |
|    3 |        2 |    3 | Om          |  9.1 | Computer | 2003-06-07 | Amazon        |
|    6 |        2 |    3 | Bhagyashree |  9.2 | IT       | 2003-09-06 | Amazon        |
|    2 |        3 |    5 | Durvesh     |  8.9 | IT       | 2003-12-27 | Mastercard    |
|    5 |        3 |    5 | Atharva     |  8.6 | Computer | 2003-07-26 | Mastercard    |
|    7 |        3 |    1 | David       |  8.9 | Computer | 2003-05-15 | Mastercard    |
+------+----------+------+-------------+------+----------+------------+---------------+
7 rows in set (0.00 sec)
```

3. **List all the Student name and Student branch of Student having package 16 LPA**

SELECT s_name, s_branch, PlacementDrive.package FROM Student INNER JOIN PlacementDrive ON Student.Drive_id = PlacementDrive.Drive_id WHERE package = 16

```
mysql> SELECT s_name, s_branch, Pla
16;
+---------+----------+---------+
| s_name  | s_branch | package |
+---------+----------+---------+
| Durvesh | IT       |      16 |
| Atharva | Computer |      16 |
| David   | Computer |      16 |
+---------+----------+---------+
3 rows in set (0.00 sec)
```

4. **List all the student names ,company_name having T_fee more than 20000**

SELECT s.s_name, t.Tcompany_name, t.T_fee FROM Student s INNER JOIN Training t ON s.T_id = t.T_id WHERE t.T_fee > 4000;

```
mysql> SELECT s.s_name, t.Tcompany_name,
+-------------+---------------+--------+
| s_name      | Tcompany_name | T_fee  |
+-------------+---------------+--------+
| Ayush       | Microsoft     | 15000  |
| Om          | Microsoft     | 15000  |
| Bhagyashree | Microsoft     | 15000  |
| Durvesh     | AWS           |  5000  |
| Atharva     | AWS           |  5000  |
+-------------+---------------+--------+
5 rows in set (0.00 sec)
```

5. **Display all training details attended by "Bhagyashree" in year 2019**

SELECT s.s_name, t.* FROM Training t INNER JOIN Student s ON t.T_id = s.T_id WHERE s.s_name = 'Bhagyashree' and t.T_year = 2019;

```
mysql> SELECT s.s_name, t.* FROM Training t INNER JOIN St
+-------------+------+---------------+--------+--------+
| s_name      | T_id | Tcompany_name | T_fee  | T_year |
+-------------+------+---------------+--------+--------+
| Bhagyashree |    3 | Microsoft     | 15000  |   2019 |
+-------------+------+---------------+--------+--------+
1 row in set (0.01 sec)
```

6. **list the total number of companies who conduct training before 2020**

```
mysql> SELECT COUNT(T_id) FROM Training t WHERE t.T_year < 2020;
+-------------+
| COUNT(T_id) |
+-------------+
|           3 |
+-------------+
1 row in set (0.00 sec)
```

7. List the students name with company 'Amazon' and location 'Bangalore'

SELECT s.s_name, pd.Pcompany_name FROM Student s INNER JOIN PlacementDrive pd ON pd.Drive_id = s.Drive_id WHERE pd.Pcompany_name='Amazon' AND pd.location = 'Banglore';

```
mysql> SELECT s.s_name, pd.Pcompany
.Pcompany_name='Amazon' AND pd.loca
+-------------+----------------+
| s_name      | Pcompany_name  |
+-------------+----------------+
| Ayush       | Amazon         |
| Om          | Amazon         |
| Bhagyashree | Amazon         |
+-------------+----------------+
3 rows in set (0.00 sec)
```

8. Find the names of all Students who have joined 'Microsoft ' training in 2015 .

SELECT s.s_name , t.Tcompany_name FROM Student s INNER JOIN Training t ON s.T_id = t.T_id WHERE t.Tcompany_name = 'Microsoft' and t.T_year = 2019;

```
+-------------+----------------+
| s_name      | Tcompany_name  |
+-------------+----------------+
| Ayush       | Microsoft      |
| Om          | Microsoft      |
| Bhagyashree | Microsoft      |
+-------------+----------------+
3 rows in set (0.00 sec)
```

9. **Create a view showing the Student and Training details.**

CREATE VIEW StudentTrainingView AS SELECT s.s_id, s.s_name, s.CGPA, s.s_branch,s_dob, t.T_id, t.Tcompany_name FROM Student s JOIN Training t ON s.T_id = t.T_id;

```
mysql> SELECT * FROM StudentTrainingView;
+------+-------------+------+----------+------------+------+----------------+
| s_id | s_name      | CGPA | s_branch | s_dob      | T_id | Tcompany_name  |
+------+-------------+------+----------+------------+------+----------------+
|    1 | Ayush       |  9.2 | Computer | 2003-01-23 |    3 | Microsoft      |
|    2 | Durvesh     |  8.9 | IT       | 2003-12-27 |    5 | AWS            |
|    3 | Om          |  9.1 | Computer | 2003-06-07 |    3 | Microsoft      |
|    4 | Ujwal       |  8.5 | IT       | 2003-08-25 |    4 | Siemens        |
|    5 | Atharva     |  8.6 | Computer | 2003-07-26 |    5 | AWS            |
|    6 | Bhagyashree |  9.2 | IT       | 2003-09-06 |    3 | Microsoft      |
|    7 | David       |  8.9 | Computer | 2003-05-15 |    1 | Mastercard     |
+------+-------------+------+----------+------------+------+----------------+
7 rows in set (0.00 sec)
```

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

CREATE A VIEW :

CREATE VIEW studView AS SELECT s.s_id, s.s_name, s.CGPA, s.s_branch, s.s_dob FROM Student s;

```
mysql> CREATE VIEW studView AS SELECT s.s_id, s.s_name, s.CGPA, s.s_branch, s.s_dob FROM Student s;
Query OK, 0 rows affected (0.01 sec)
```

INSERT NEW VALUE :
INSERT INTO studView VALUES(8, 'New Student', 8.2, "ENTC", '2004-08-15');

```
mysql> INSERT INTO studView VALUES(8, 'New Student', 8.2, "ENTC", '2004-08-15');
Query OK, 1 row affected (0.01 sec)

mysql> select * from studView;
+------+-------------+------+----------+------------+
| s_id | s_name      | CGPA | s_branch | s_dob      |
+------+-------------+------+----------+------------+
|    1 | Ayush       |  9.2 | Computer | 2003-01-23 |
|    2 | Durvesh     |  8.9 | IT       | 2003-12-27 |
|    3 | Om          |  9.1 | Computer | 2003-06-07 |
|    4 | Ujwal       |  8.5 | IT       | 2003-08-25 |
|    5 | Atharva     |  8.6 | Computer | 2003-07-26 |
|    6 | Bhagyashree |  9.2 | IT       | 2003-09-06 |
|    7 | David       |  8.9 | Computer | 2003-05-15 |
|    8 | New Student |  8.2 | ENTC     | 2004-08-15 |
+------+-------------+------+----------+------------+
8 rows in set (0.00 sec)
```

UPDATE A RECORD :
UPDATE studView SET s_branch='IT', s_dob='2003-08-26' WHERE s_id = 3;

```
mysql> select * from studView;
+------+-------------+------+----------+------------+
| s_id | s_name      | CGPA | s_branch | s_dob      |
+------+-------------+------+----------+------------+
|    1 | Ayush       |  9.2 | Computer | 2003-01-23 |
|    2 | Durvesh     |  8.9 | IT       | 2003-12-27 |
|    3 | Om          |  9.1 | IT       | 2003-08-26 |
|    4 | Ujwal       |  8.5 | IT       | 2003-08-25 |
|    5 | Atharva     |  8.6 | Computer | 2003-07-26 |
|    6 | Bhagyashree |  9.2 | IT       | 2003-09-06 |
|    7 | David       |  8.9 | Computer | 2003-05-15 |
|    8 | New Student |  8.2 | ENTC     | 2004-08-15 |
+------+-------------+------+----------+------------+
```

DELETE A RECORD :

```
mysql> DELETE FROM studView WHERE s_id = 7;
Query OK, 1 row affected (0.01 sec)

mysql> select * from studView;
+------+-------------+------+----------+------------+
| s_id | s_name      | CGPA | s_branch | s_dob      |
+------+-------------+------+----------+------------+
|    1 | Ayush       |  9.2 | Computer | 2003-01-23 |
|    2 | Durvesh     |  8.9 | IT       | 2003-12-27 |
|    3 | Om          |  9.1 | IT       | 2003-08-26 |
|    4 | Ujwal       |  8.5 | IT       | 2003-08-25 |
|    5 | Atharva     |  8.6 | Computer | 2003-07-26 |
|    6 | Bhagyashree |  9.2 | IT       | 2003-09-06 |
|    8 | New Student |  8.2 | ENTC     | 2004-08-15 |
+------+-------------+------+----------+------------+
7 rows in set (0.00 sec)
```

DELETE A VIEW :

```
mysql> DROP VIEW IF EXISTS StudentTrainingView;
Query OK, 0 rows affected (0.03 sec)
```