Assignment No 2A

Student Schema
Consider the following relational Schema.
● Student(s_id,Drive_id,T_id,s_name,CGPA,s_branch,S_dob)
● PlacementDrive(Drive_id,Pcompany_name,package,location)
● Training (T_id,Tcompany_name,T_Fee,T_year)

Table Creation

```
mysql> CREATE TABLE PlacementDrive(  Drive_id int NOT NULL, Pcompany_name
varchar(255), pakage int NOT NULL, location varchar(255), PRIMARY KEY(Drive_id) );
Query OK, 0 rows affected (13.57 sec)

mysql> CREATE TABLE Training( T_id int AUTO_INCREMENT, Tcompany_name varchar(255),
T_fee int NOT NULL , T_year date NOT NULL, PRIMARY KEY (T_id));
Query OK, 0 rows affected (0.18 sec)

mysql> CREATE TABLE Student( S_id int AUTO_INCREMENT , Drive_id int NULL , T_id int
NULL , s_name varchar(255),CGPA int NOT NULL , s_branch varchar(255) , s_dob date NOT
NULL , PRIMARY KEY (S_id), FOREIGN KEY(T_id) REFERENCES Training(T_id) ON
DELETE CASCADE , FOREIGN KEY(Drive_id) REFERENCES PlacementDrive(Drive_id) ON
DELETE CASCADE);
Query OK, 0 rows affected (0.21 sec)
```

1. Insert at least 10 records in the Student table and insert other tables accordingly.

```
mysql> INSERT INTO PlacementDrive (Drive_id , Pcompany_name , pakage , location )
VALUES (1 , "MicroSoft" , 50000 ,"Pune" ),
    -> (2 , "Google" , 40000 , "Mumbai"),
    -> (3 , "Flipkart" , 30000, "Pune"),
    -> (4 , "Amazon", 25000, "Nagpur"),
    -> (5 , "Zomato", 35000, "Delhi"),
    -> (6 , "Facebook" , 15000, "Delhi");
Query OK, 6 rows affected (0.03 sec)
Records: 6  Duplicates: 0  Warnings: 0
```

```
mysql> INSERT INTO Training(Tcompany_name , T_fee , T_year) VALUES("Uber" , 25000,
'2023-4-28'),
```

```
    -> ("Ola" , 35000 , '2023-8-12'),
    -> ("Zepto" , 10000, '2024-1-12'),
    -> ("Swiggy" ,5000, '2023-3-4'),
    -> ("Blinkit",4000, '2019-3-28'),
    -> ("Google" , 6000, '2020-4-25'),
    -> ("Microsoft",7000,'2020-11-1'),
    -> ("Flipkart",3500,'2020-10-28'),
    -> ("Amazon",2500, '2020-9-16');
Query OK, 9 rows affected (0.03 sec)
Records: 9  Duplicates: 0  Warnings: 0

mysql> INSERT INTO Student( Drive_id , T_id ,s_name,CGPA , s_branch , s_dob  ) VALUES(1
, 1 , "Soham" ,8.8, "Computer Engineering", '2004-11-1' ),
    -> (1 , 2 ,"Pawan", 6.9 ,"Computer Engineering" , '2004-9-5' ),
    -> (3 , 1 , "Lakshya" , 9.9, "Computer Engineering", '2005-6-28'),
    -> (4 , 5 , "John" , 9.1 , "Computer Engineering" , '2003-4-19'),
    -> (2 , 1, "Siddhesh",8.5 , "Information Technology", '2004-8-23'),
    -> (5 , 8 , "Anish", 8.8 , "Computer Engineering" , '2004-9-13'),
    -> (1 , 7 , "Sanket" , 6.9 , "Information Technology" , '2004-7-22'),
    -> (1, 4 ,"Dhanesh", 6.6, "Electronics Engineering", '2004-2-13'),
    -> (2,7, "Avdhoot", 8.9 , "Electronics Engineering" , '2003-5-21'),
    -> (3 , 4 , "Ramesh" , 8.36, "Computer Engineering", '2004-11-24');
Query OK, 10 rows affected (0.09 sec)
Records: 10  Duplicates: 0  Warnings: 0


mysql> Select * from Student;
+------+----------+------+----------+------+-----------------------+------------+
| S_id | Drive_id | T_id | s_name   | CGPA | s_branch              | s_dob      |
+------+----------+------+----------+------+-----------------------+------------+
|    2 |        1 |    1 | Soham    |  8.8 | Computer Engineering  | 2004-11-01 |
|    3 |        1 |    2 | Pawan    |  6.9 | Computer Engineering  | 2004-09-05 |
|    4 |        3 |    1 | Lakshya  |  9.9 | Computer Engineering  | 2005-06-28 |
|    5 |        4 |    5 | John     |  9.1 | Computer Engineering  | 2003-04-19 |
|    6 |        2 |    1 | Siddhesh |  8.5 | Information Technology | 2004-08-23 |
|    7 |        5 |    8 | Anish    |  8.8 | Computer Engineering  | 2004-09-13 |
|    8 |        1 |    7 | Sanket   |  6.9 | Information Technology | 2004-07-22 |
|    9 |        1 |    4 | Dhanesh  |  6.6 | Electronics Engineering | 2004-02-13 |
|   10 |        2 |    7 | Avdhoot  |  8.9 | Electronics Engineering | 2003-05-21 |
|   11 |        3 |    4 | Ramesh   | 8.36 | Computer Engineering  | 2004-11-24 |
+------+----------+------+----------+------+-----------------------+------------+
10 rows in set (0.00 sec)
```

```
mysql> select * from PlacementDrive;
+----------+---------------+--------+----------+
| Drive_id | Pcompany_name | pakage | location |
+----------+---------------+--------+----------+
|        1 | MicroSoft     |  50000 | Pune     |
|        2 | Google        |  40000 | Mumbai   |
|        3 | Flipkart      |  30000 | Pune     |
|        4 | Amazon        |  25000 | Nagpur   |
|        5 | Zomato        |  35000 | Delhi    |
|        6 | Facebook      |  15000 | Delhi    |
+----------+---------------+--------+----------+
6 rows in set (0.00 sec)


mysql> Select * from Training;
+------+---------------+-------+------------+
| T_id | Tcompany_name | T_fee | T_year     |
+------+---------------+-------+------------+
|    1 | Uber          | 25000 | 2023-04-28 |
|    2 | Ola           | 35000 | 2023-08-12 |
|    3 | Zepto         | 10000 | 2024-01-12 |
|    4 | Swiggy        |  5000 | 2023-03-04 |
|    5 | Blinkit       |  4000 | 2019-03-28 |
|    6 | Google        |  6000 | 2020-04-25 |
|    7 | Microsoft     |  7000 | 2020-11-01 |
|    8 | Flipkart      |  3500 | 2020-10-28 |
|    9 | Amazon        |  2500 | 2020-09-16 |
+------+---------------+-------+------------+
9 rows in set (0.00 sec)
```

Create view(simple), index, sequence and synonym based on above tables.

```
mysql> CREATE INDEX idx ON Student (S_id);
Query OK, 0 rows affected (0.18 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> CREATE VIEW Student_view AS SELECT S_id , s_name , CGPA , s_branch , s_dob
FROM Student;
Query OK, 0 rows affected (0.03 sec)


mysql> SELECT * FROM  Student_view;
+------+----------+------+------------------------+------------+
| S_id | s_name   | CGPA | s_branch               | s_dob      |
```

```
+------+----------+------+------------------------+------------+
|    1 | Samir    |  8.7 | Computer Engineering    | 2004-10-01 |
|    2 | Soham    |  8.8 | Computer Engineering    | 2004-11-01 |
|    4 | Lakshya  |  9.9 | Computer Engineering    | 2005-06-28 |
|    5 | John     |  9.1 | Computer Engineering    | 2003-04-19 |
|    6 | Siddhesh |  8.5 | Information Technology  | 2004-08-23 |
|    7 | Anish    |  8.8 | Computer Engineering    | 2004-09-13 |
|   10 | Avdhoot  |  8.9 | Electronics Engineering | 2003-05-21 |
|   11 | Ramesh   | 8.36 | Computer Engineering    | 2004-11-24 |
+------+----------+------+------------------------+------------+
8 rows in set (0.00 sec)

mysql>
```

2. Display all students details with branch ‘Computer ‘and ‘It’ and student name starting with 'a' or 'd'.

```
mysql> select * from Student where s_branch IN ("Computer Engineering","Information
Technology") AND s_name LIKE "a%" OR "d%";
+------+----------+------+--------+------+----------------------+------------+
| S_id | Drive_id | T_id | s_name | CGPA | s_branch             | s_dob      |
+------+----------+------+--------+------+----------------------+------------+
|    7 |        5 |    8 | Anish  |  8.8 | Computer Engineering | 2004-09-13 |
+------+----------+------+--------+------+----------------------+------------+
1 row in set, 5 warnings (0.00 sec)
```

3. list the number of different companies.(use of distinct)

```
mysql> SELECT DISTINCT Pcompany_name AS company_name FROM PlacementDrive
    -> UNION
    -> SELECT DISTINCT Tcompany_name AS company_name FROM Training;
+--------------+
| company_name |
+--------------+
| MicroSoft    |
| Google       |
| Flipkart     |
| Amazon       |
| Zomato       |
| Facebook     |
| Uber         |
| Ola          |
```

```
| Zepto        |
| Swiggy       |
| Blinkit      |
+--------------+
11 rows in set (0.00 sec)
```

4. Give 15% increase in fee of the Training whose joining year is 2019.

```
mysql> UPDATE Training
    -> SET T_fee = T_fee * 1.15
    -> WHERE YEAR(T_year) = 2019
    -> ;
Query OK, 1 row affected (0.04 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> Select * from Training;
+------+---------------+-------+------------+
| T_id | Tcompany_name | T_fee | T_year     |
+------+---------------+-------+------------+
|    1 | Uber          | 25000 | 2023-04-28 |
|    2 | Ola           | 35000 | 2023-08-12 |
|    3 | Zepto         | 10000 | 2024-01-12 |
|    4 | Swiggy        |  5000 | 2023-03-04 |
|    5 | Blinkit       |  6084 | 2019-03-28 |
|    6 | Google        |  6000 | 2020-04-25 |
|    7 | Microsoft     |  7000 | 2020-11-01 |
|    8 | Flipkart      |  3500 | 2020-10-28 |
|    9 | Amazon        |  2500 | 2020-09-16 |
+------+---------------+-------+------------+
9 rows in set (0.00 sec)
```

5. Delete Student details having CGPA score less than 7.

```
mysql> delete from Student WHERE CGPA < 7;
Query OK, 3 rows affected (0.04 sec)

mysql> Select * from Student;
+------+----------+------+----------+------+-----------------------+------------+
| S_id | Drive_id | T_id | s_name   | CGPA | s_branch              | s_dob      |
+------+----------+------+----------+------+-----------------------+------------+
```

```
|    1 |        5 |    1 | Samir    |  8.7 | Computer Engineering    | 2004-10-01 |
|    2 |        1 |    1 | Soham    |  8.8 | Computer Engineering    | 2004-11-01 |
|    4 |        3 |    1 | Lakshya  |  9.9 | Computer Engineering    | 2005-06-28 |
|    5 |        4 |    5 | John     |  9.1 | Computer Engineering    | 2003-04-19 |
|    6 |        2 |    1 | Siddhesh |  8.5 | Information Technology  | 2004-08-23 |
|    7 |        5 |    8 | Anish    |  8.8 | Computer Engineering    | 2004-09-13 |
|   10 |        2 |    7 | Avdhoot  |  8.9 | Electronics Engineering | 2003-05-21 |
|   11 |        3 |    4 | Ramesh   | 8.36 | Computer Engineering    | 2004-11-24 |
+------+----------+------+----------+------+-------------------------+------------+
8 rows in set (0.00 sec)
```

6. Find the names of companies belonging to pune or Mumbai

```
mysql> SELECT Pcompany_name FROM PlacementDrive WHERE location IN
("Pune","Mumbai");
+---------------+
| Pcompany_name |
+---------------+
| MicroSoft     |
| Google        |
| Flipkart      |
+---------------+
3 rows in set (0.00 sec)
```

7. Find the student name who joined training in 2019 as well as in 2021

```
mysql> SELECT DISTINCT s.s_name
    -> FROM Student s
    -> INNER JOIN Training t ON s.T_id = t.T_id
    -> WHERE YEAR(t.T_year) IN (2019, 2021);
+----------+
| s_name   |
+----------+
| Samir    |
| Soham    |
| Lakshya  |
| John     |
| Siddhesh |
+----------+
5 rows in set (0.00 sec)
```

8. Find the student name having maximum CGPA score and names of students having CGPA score between 7 to 9 .

```
mysql> SELECT s_name From Student WHERE CGPA = (SELECT MAX(CGPA) FROM
Student );
+---------+
| s_name  |
+---------+
| Lakshya |
+---------+
1 row in set (0.00 sec)
```

```
mysql> SELECT s_name From Student WHERE CGPA BETWEEN 7 AND 9;
+----------+
| s_name   |
+----------+
| Samir    |
| Soham    |
| Siddhesh |
| Anish    |
| Avdhoot  |
| Ramesh   |
+----------+
6 rows in set (0.01 sec)
```

9. Display all Student name with T_id with decreasing order of Fees

```
mysql> SELECT s.s_name, t.T_id, t.T_fee FROM Student s INNER JOIN Training t ON s.T_id =
t.T_id ORDER BY t.T_fee DESC;
+----------+------+-------+
| s_name   | T_id | T_fee |
+----------+------+-------+
| Samir    |    1 | 25000 |
| Soham    |    1 | 25000 |
| Lakshya  |    1 | 25000 |
| Siddhesh |    1 | 25000 |
| Avdhoot  |    7 |  7000 |
| John     |    5 |  6084 |
| Ramesh   |    4 |  5000 |
```

```
| Anish    |    8 |  3500 |
+----------+------+-------+
8 rows in set (0.01 sec)
```

10. Display PCompany name, S_name ,location and Package with Package 30K, 40K and 50k

```
mysql> SELECT p.Pcompany_name , s.s_name , p.location , p.pakage From Student s INNER JOIN PlacementDrive as p ON s.Drive_id = p.Drive_id WHERE p.pakage IN(30000,40000,50000);
+---------------+----------+----------+--------+
| Pcompany_name | s_name   | location | pakage |
+---------------+----------+----------+--------+
| MicroSoft     | Soham    | Pune     |  50000 |
| Flipkart      | Lakshya  | Pune     |  30000 |
| Google        | Siddhesh | Mumbai   |  40000 |
| Google        | Avdhoot  | Mumbai   |  40000 |
| Flipkart      | Ramesh   | Pune     |  30000 |
+---------------+----------+----------+--------+
5 rows in set (0.00 sec)
```