Course Name: DBMS Lab

Course Code: CSEG2146

Faculty Name: Dr. Priyanka Singh

Submitted By:

Anoushka Pandey

Batch: B1

Sap Id: 500120245

Roll no.: R2142230030

Experiment 9:

Title: To understand the concepts of Views.

Objective: Students will be able to implement the concept of views.

1. Create table of table name: EMPLOYEES and add 6 rows

```
mysql> USE Exp9;
Database changed
mysql> CREATE TABLE EMPLOYEES (
    ->        Employee_id CHAR(10) PRIMARY KEY,
    ->        First_Name CHAR(30) NOT NULL,
    ->        Last_Name CHAR(30) NOT NULL,
    ->        DOB DATE,
    ->        Salary NUMBER(25) NOT NULL,
    ->        Department_id CHAR(10)
    -> );
```

```
mysql> INSERT INTO EMPLOYESS (Employee_id, First_Name, Last_Name, DOB, SALARY, Department_id) VALUES
    -> ('EMP001', 'Alice', 'Johnson', '1990-01-01', 50000, 'D10'),
    -> ('EMP002', 'Bob', 'Smith', '1992-03-15', 60000, 'D20'),
    -> ('EMP003', 'Charlie', 'Brown', '1991-07-20', 55000, 'D10'),
    -> ('EMP004', 'David', 'Lee', '1993-11-10', 48000, 'D20'),
    -> ('EMP005', 'Emily', 'Davis', '1994-05-25', 52000, 'D10'),
    -> ('EMP006', 'Frank', 'Miller', '1995-09-05', 58000, 'D20');
Query OK, 6 rows affected (0.01 sec)
Records: 6  Duplicates: 0  Warnings: 0
```

2. Execute the following view related queries:

1. Create View of name emp_view and the column would be Employee_id, Last_Name, salary and department_id only.

```
mysql> CREATE VIEW emp_view AS
    -> SELECT Employee_id, Last_Name, Salary, Department_id
    -> FROM EMPLOYESS;
Query OK, 0 rows affected (0.02 sec)
```

2. Insert values into view(remove the NOT NULL constraint and then insert values):

```
mysql> ALTER TABLE EMPLOYESS MODIFY Last_Name CHAR(30);
Query OK, 0 rows affected (0.19 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> ALTER TABLE EMPLOYESS MODIFY Salary DECIMAL(15,2);
Query OK, 6 rows affected (0.10 sec)
Records: 6  Duplicates: 0  Warnings: 0
```

```
mysql> ALTER TABLE EMPLOYESS MODIFY First_Name CHAR(30) DEFAULT
 NULL;
Query OK, 0 rows affected (0.10 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> ALTER TABLE EMPLOYESS MODIFY Last_Name CHAR(30) DEFAULT
NULL;
Query OK, 0 rows affected (0.03 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> ALTER TABLE EMPLOYESS MODIFY Salary DECIMAL(15,2) DEFAUL
T 0;
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> INSERT INTO emp_view(Employee_id, Last_Name, Salary, Dep
artment_id) VALUES ('E007','Singh',60000,'D11');
Query OK, 1 row affected (0.01 sec)
```

3. Modify, delete and drop operations are performed on view.

```
mysql> UPDATE emp_view
    -> SET Salary=62000 WHERE Employee_id='E007';
Query OK, 1 row affected (0.02 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> DELETE FROM emp_view
    -> WHERE Employee_id='E007';
Query OK, 1 row affected (0.01 sec)

mysql> DROP VIEW emp_view;
Query OK, 0 rows affected (0.02 sec)
```

4. Creates a view named salary view. The view shows the employees in department 20 and their annual salary.

```
mysql> CREATE VIEW salary_view AS
    -> SELECT Employee_id, Last_Name, Salary * 12 AS Annual_Salary FROM EMPLOYESS WHERE Department_id='D20';
Query OK, 0 rows affected (0.03 sec)
```

```
mysql> SELECT * FROM salary_view;
+-------------+-----------+---------------+
| Employee_id | Last_Name | Annual_Salary |
+-------------+-----------+---------------+
| EMP002      | Smith     |        720000 |
| EMP004      | Lee       |        576000 |
| EMP006      | Miller    |        696000 |
+-------------+-----------+---------------+
3 rows in set (0.01 sec)
```