ROLL NO - 2043

Group B- Assignment no. 6

Title: Execute DDL statements which demonstrate the use of views. Try to update the base table using its corresponding view. Also consider restrictions on updatable views and perform view creation from multiple tables.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Create Database and switch to it\*\*\*\*\*\*\*\*\*\*\*\*\*\*

mysql> CREATE DATABASE university;

Query OK, 1 row affected (0.01 sec)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Create Table and display its schema\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

mysql> CREATE TABLE course( id INT PRIMARY KEY, name VARCHAR(30), duration INT );

Query OK, 0 rows affected (0.06 sec)

mysql> desc course;

+----------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+----------+-------------+------+-----+---------+-------+

| id | int | NO | PRI | NULL | |

| name | varchar(30) | YES | | NULL | |

| duration | int | YES | | NULL | |

+----------+-------------+------+-----+---------+-------+

3 rows in set (0.14 sec)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Insert data and display it\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

mysql> INSERT INTO course(id , name , duration) VALUES (101 , "CS" , 2), (102 , "IT" , 3),(103 , "E&TC" , 3),(104 , "ELECTRICAL", 4),(105 ,"MECHANICAL" , 3);

Query OK, 1 row affected (0.02 sec)

mysql> SELECT \* FROM course;

+-----+------------+----------+

| id | name | duration |

+-----+------------+----------+

| 101 | CS | 2 |

| 102 | IT | 3 |

| 103 | E&TC | 3 |

| 104 | ELECTRICAL | 4 |

| 105 | MECHANICAL | 3 |

+-----+------------+----------+

5 rows in set (0.00 sec)

OPERATIONS ON VIEW

1] Create View and display it’s schema

mysql> CREATE VIEW v\_course AS SELECT id , name FROM course;

Query OK, 0 rows affected (0.01 sec)

mysql> desc v\_course;

+-------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+-------------+------+-----+---------+-------+

| id | int | NO | | NULL | |

| name | varchar(30) | YES | | NULL | |

+-------+-------------+------+-----+---------+-------+

2 rows in set (0.00 sec)

mysql> SELECT \* FROM v\_course;

+-----+------------+

| id | name |

+-----+------------+

| 101 | CS |

| 102 | IT |

| 103 | E&TC |

| 104 | ELECTRICAL |

| 105 | MECHANICAL |

+-----+------------+

5 rows in set (0.00 sec)

mysql> SHOW TABLES;

+----------------------+

| Tables\_in\_university |

+----------------------+

| course |

| student |

| v\_course |

+----------------------+

3 rows in set (0.00 sec)

3] INSERT data through view and display data through view and from original table

mysql> INSERT INTO v\_course (id, name ) VALUES ( 106, "AIDS");

Query OK, 1 row affected (0.01 sec)

mysql> SELECT \* FROM v\_course;

+-----+------------+

| id | name |

+-----+------------+

| 101 | CS |

| 102 | IT |

| 103 | E&TC |

| 104 | ELECTRICAL |

| 105 | MECHANICAL |

| 106 | AIDS |

+-----+------------+

6 rows in set (0.00 sec)

mysql> SELECT \* FROM course;

+-----+------------+----------+

| id | name | duration |

+-----+------------+----------+

| 101 | CS | 2 |

| 102 | IT | 3 |

| 103 | E&TC | 3 |

| 104 | ELECTRICAL | 4 |

| 105 | MECHANICAL | 3 |

| 106 | AIDS | NULL |

+-----+------------+----------+

6 rows in set (0.00 sec)

4] UPDATE Data through view and display data through view and from original table

mysql> UPDATE v\_course SET name = "CIVIL" WHERE id = 106;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> SELECT \* FROM v\_course;

+-----+------------+

| id | name |

+-----+------------+

| 101 | CS |

| 102 | IT |

| 103 | E&TC |

| 104 | ELECTRICAL |

| 105 | MECHANICAL |

| 106 | CIVIL |

+-----+------------+

6 rows in set (0.00 sec)

mysql> SELECT \* FROM course;

+-----+------------+----------+

| id | name | duration |

+-----+------------+----------+

| 101 | CS | 2 |

| 102 | IT | 3 |

| 103 | E&TC | 3 |

| 104 | ELECTRICAL | 4 |

| 105 | MECHANICAL | 3 |

| 106 | CIVIL | NULL |

+-----+------------+----------+

6 rows in set (0.00 sec)

5] DELETE Data through view and display data through view and from original table

mysql> DELETE FROM v\_course WHERE name = "CIVIL";

Query OK, 1 row affected (0.01 sec)

mysql> SELECT \* FROM v\_course;

+-----+------------+

| id | name |

+-----+------------+

| 101 | CS |

| 102 | IT |

| 103 | E&TC |

| 104 | ELECTRICAL |

| 105 | MECHANICAL |

+-----+------------+

5 rows in set (0.00 sec)

mysql> SELECT \* FROM v\_course;

+-----+------------+

| id | name |

+-----+------------+

| 101 | CS |

| 102 | IT |

| 103 | E&TC |

| 104 | ELECTRICAL |

| 105 | MECHANICAL |

+-----+------------+

5 rows in set (0.00 sec)

6] ALTER VIEW

mysql> ALTER VIEW v\_course AS SELECT id , duration FROM course WHERE name = "ELECTRICAL";

Query OK, 0 rows affected (0.02 sec)

mysql> SELECT \* FROM v\_course;

+-----+----------+

| id | duration |

+-----+----------+

| 104 | 4 |

+-----+----------+

1 row in set (0.00 sec)

7] DROP VIEW

mysql> DROP VIEW v\_course;

Query OK, 0 rows affected (0.01 sec)

mysql> SELECT \* FROM v\_course;

ERROR 1146 (42S02): Table 'university.v\_course' doesn't exist

mysql>