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Experiment1.1

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Branch: CSE   **Section/Group:** 608 (B)

Semester: 3rd   **Date of Performance:** 24th August

Subject Name: DBMS   **Subject Code:** 21CSH-214

Aim: To implement different types of DDL, DML, DCL queries

DBMS script and Output:

COMMAND DEFINITION: There are several commands of DDL,DML and DCL.

I. DDL COMMANDS

- DDL changes the structure of the table like creating a table, deleting a table, altering a table, etc.

1. CREATE Command:- This command is used for creating tables. The column name must be specified along with datatype and there should be one column.

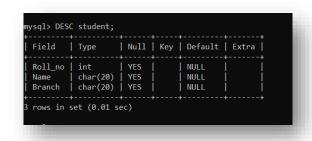**Syntax:- :** Create table <tablename>(col1,datatype, col2,datatype…… coln,datatype);

Output:-

```
mysql> CREATE table student(Roll_no int, Name char(20), Branch char(20));
Query OK, 0 rows affected (0.02 sec)
```

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2. DESCRIBE Command:- This command is used for displaying information about tables.

Syntax:- DESC tablename

```
mysql> DESC student;
+---------+----------+------+-----+---------+-------+
| Field   | Type     | Null | Key | Default | Extra |
+---------+----------+------+-----+---------+-------+
| Roll_no | int      | YES  |     | NULL    |       |
| Name    | char(20) | YES  |     | NULL    |       |
| Branch  | char(20) | YES  |     | NULL    |       |
+---------+----------+------+-----+---------+-------+
3 rows in set (0.01 sec)
```

ALTER Table:- This command is used to modify the present database and related tables.

Syntax:- ALTER TABLE TableName ADD ColumnNameData_Type; ALTER TABLE TableName DROPColumnName; ALTER TABLE TableName MODIFY COLUMNColumnNameData_Type;

```
mysql> ALTER TABLE student add UID int;
Query OK, 0 rows affected (0.03 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> ALTER TABLE student drop Branch;
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> ALTER TABLE student modify Branch char(30);
Query OK, 0 rows affected (0.03 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

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3. RENAME Command:- This command is used to rename any database objects in the server when we want to modify the present or running table name.

Syntax:- ALTER TABLE TableName_A RENAME TO TableName_B;

```
mysql> ALTER TABLE STUDENT RENAME to data;
Query OK, 0 rows affected (0.01 sec)

mysql>
```

4. DROP Command:- This command is used to delete a whole database or tables. It destroys the objects like existing database.

Syntax:- DROP object object_name.

```
mysql> DROP TABLE data;
Query OK, 0 rows affected (0.01 sec)

mysql>
```

5. TRUNCATE Command:-It is also used to delete from mytable statement.

Syntax:- TRUNCATE TABLE table_name;

```
mysql> TRUNCATE TABLE data;
Query OK, 0 rows affected (0.02 sec)

mysql>
```

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II. DML Commands

- DML commands are used to modify the database. It is responsible for all form of changes in the database.

1.INSERT Command   : - It is used to insert data into a table.

Syntax:- INSERT INTO table_name (column1, column2, column3,..) VALUES (value1, value2, value3,..);

```
mysql> INSERT INTO student(Roll_no,Name,Branch) VALUE ('1','Ankush','CSE');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO student(Roll_no,Name,Branch) VALUE ('2','Ankit','CSE');
Query OK, 1 row affected (0.01 sec)
```

2. SELECT Command:-The SELECT statement is used to select data from a database.
Syntax:- SELECT * FROM table_name;

```
mysql> SELECT * FROM student;
+---------+--------+--------+
| Roll_no | Name   | Branch |
+---------+--------+--------+
|       1 | Ankush | CSE    |
|       2 | Ankit  | CSE    |
+---------+--------+--------+
2 rows in set (0.00 sec)

mysql>
```

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3.UPDATE Command:-The UPDATE statement is used to update the data of an existing table in database.

Syntax:- UPDATE table_name SET column1 = value1, column2 = value2,... WHERE condition;

```
mysql> UPDATE student SET Name='Anika' WHERE Roll_no=3;
Query OK, 0 rows affected (0.01 sec)
Rows matched: 0  Changed: 0  Warnings: 0
```

4. DELETE Command:- Delete command is used to delete the existing data from record of the existing table.

Syntax: DELETE FROM table_name WHERE some_condition;

```
mysql> delete from student where Roll_no=2;
Query OK, 1 row affected (0.00 sec)

mysql>
```

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III.   DCL Commands.

- DCL commands are used to grant and take back authority from any database user.

1.GRANT Command:- To grant privileges of a user account this command is used because using create command, it creates only new user but it doesn't grant privileges to a user account. That is why Grant command is used.

Syntax:- GRANT privileges_names ON object TO user;

2.REVOKE:-This command withdraws the user's access privileges given by using the GRANT command.

Syntax : revoke privilege_name on object_name
from {user_name | public | role_name};