Experiment No. 3

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Roll No: 80

Title: DDL statements

Objective:

Study of DDL statements like create, alter, truncate, rename & drop.

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1. Create a table

```sql
CREATE TABLE student (
    name VARCHAR(50),
    roll_no INT
);
```

Output:

```
Query OK, 0 rows affected
```

---

2. Describe the Table Structure

```sql
DESC student;
```

Output:

```
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| name     | varchar(50) | YES  |     | NULL    |       |
| roll_no  | int         | YES  |     | NULL    |       |
+----------+-------------+------+-----+---------+-------+
```

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3. Rename the Table

```
sql

ALTER TABLE student RENAME TO student_info;
DESCRIBE student_info;
```

Output:

```
Query OK, 0 rows affected
```

---

4. Modify the column name

```
sql

ALTER TABLE student_info CHANGE name full_name VARCHAR(100);
DESCRIBE student_info;
```

Output:

```
+-----------+--------------+------+-----+---------+-------+
| Field     | Type         | Null | Key | Default | Extra |
+-----------+--------------+------+-----+---------+-------+
| full_name | varchar(100) | YES  |     | NULL    |       |
| roll_no   | int          | YES  |     | NULL    |       |
+-----------+--------------+------+-----+---------+-------+
```

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5. Add the constraint (make roll_no the primary key)

```
sql

ALTER TABLE student_info ADD CONSTRAINT pk_roll PRIMARY KEY (roll_no);
DESCRIBE student_info;
```

Output:

```
+-----------+--------------+------+-----+---------+-------+
| Field     | Type         | Null | Key | Default | Extra |
+-----------+--------------+------+-----+---------+-------+
| full_name | varchar(100) | YES  |     | NULL    |       |
| roll_no   | int          | NO   | PRI | NULL    |       |
+-----------+--------------+------+-----+---------+-------+
```

6. Add new Column

```
sql

ALTER TABLE student_info ADD age INT;
DESCRIBE student_info;
```

Output:

```
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| full_name | varchar(100) | YES |     | NULL    |       |
| roll_no   | int         | NO   | PRI | NULL    |       |
| age       | int         | YES |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
```

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7. Delete the column

```
sql

ALTER TABLE student_info DROP COLUMN age;
DESCRIBE student_info;
```

Output:

```
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| full_name | varchar(100) | YES |     | NULL    |       |
| roll_no   | int         | NO   | PRI | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
```

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8. Truncate the table

```
sql

TRUNCATE TABLE student_info;
SELECT * FROM student_info;
```

Output:

```
Empty set (0.00 sec)
```

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9. Drop the table

```sql
DROP TABLE student_info;
SHOW TABLES;
```

Output:

```
Empty set (0.00 sec)
```

OUTCOMES:

We created, altered and removed tables from the database.