Title:

Implementation of DDL commands of SQL

Intro:

In this lab assignment, we will explore Data Definition Language (DDL) commands in SQL. DDL commands are used to define, modify, and manage database structures such as tables, indexes, and schemas. We will cover the CREATE, ALTER, DROP, and TRUNCATE commands, demonstrating their usage with examples.

Code:

Creating a Table:

```
sql
Copy code
CREATE TABLE Courses (
    CourseID INT PRIMARY KEY,
    CourseName VARCHAR(100),
    Instructor VARCHAR(100),
    Credits INT
);
```

Altering a Table:

```
sql
Copy code
ALTER TABLE Courses
ADD Semester VARCHAR(10);
```

Dropping a Table:

```
sql
Copy code
DROP TABLE Courses;
```

Truncating a Table:

```
sql
Copy code
TRUNCATE TABLE Courses;
```

Output:

After Creating the Table:

CourseID	CourseName	Instructor	Credits

After Altering the Table:

CourseID	CourseName	Instructor	Credits	Semester

After Dropping the Table: *No output as the table no longer exists.*

After Truncating the Table: *No output as the table is empty, but the structure remains.*

Conclusion:

In this lab, we implemented various DDL commands in SQL. We learned how to create a table with the CREATE command, modify its structure using the ALTER command, remove the table completely with the DROP command, and clear all data from the table while retaining its structure with the TRUNCATE command. Understanding these commands is essential for managing and structuring databases effectively.